CDX-CA600/CA600X

SERVICE MANUAL

Ver 1.1 2002. 04

AEP Model
UK Model
CDX-CA600/CA600X
E Model
CDX-CA600X

Photo: CDX-CA600X

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	CDX-CA900/CA900X
CD Drive Mechanism Type	MG-393XA-121//Q
Optical Pick-up Name	KSS-720A

SPECIFICATIONS

CD player section

Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	66 dB (stereo), 72 dB (mono)
Harmonic distortion at 1 kHz	0.6% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW : 531 – 1,602 kHz LW : 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW : 30 µV LW : 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	50 W × 4 (at 4 ohms)

General

Outputs	Power aerial relay control lead
Input	Telephone ATT control lead
Tone controls	Bass ±9 dB at 100 Hz Treble ±9 dB at 10 kHz
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 178 × 50 × 177 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Card remote commander RM-X115 (E model)

Note

This unit cannot be connected to a digital preamplifier or an equalizer.

Design and specifications are subject to change without notice.

FM/MW/LW COMPACT DISC PLAYER

9-873-434-02
2002D0400-1
© 2002. 04

Sony Corporation
e Vehicle Company
Published by Sony Engineering Corporation

SONY®

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

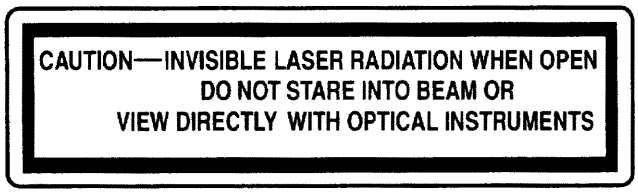
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

- CDX-CA600/CA600X: AEP, UK model

This label is located on the bottom of the chassis.



This label is located on the drive unit's internal chassis.

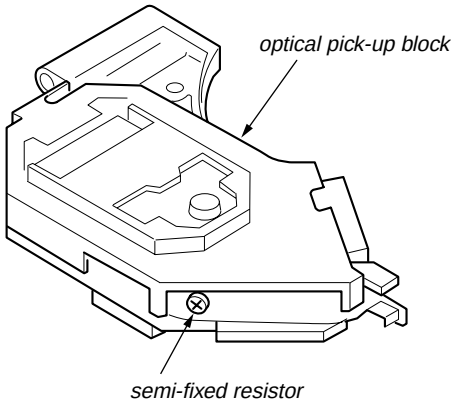
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



TEST DISCS

This set can playback CD-R and CD-ROM discs. The following test discs should be used to check the capability:

CD-R test disc TCD-R082LMT (Part No. J-2502-063-1)
CD-RW test disc TCD-W082L (Part No. J-2502-063-2)

NOTES ON CD-R/CD-RW DISCS

- You can play CD-Rs (recordable CDs)/CD-RWs (rewritable CDs) designed for audio use on this unit.
  Look for these marks to distinguish CD-Rs/CD-RWs for audio use.

These marks denote that a disc is not for audio use.

- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/CD-RW that is not finalized*.

* A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.

TABLE OF CONTENTS

1. GENERAL

Location of controls
(CDX-CA600/CA600X: AEP, UK model) 4
Location of controls (CDX-CA600X: E model) 4
Connections (CDX-CA600/CA600X: AEP, UK model) 5
Connections (CDX-CA600X: E model) 6

2. DISASSEMBLY

2-1. Panel (1) Assy, Sub 7
2-2. CD Mechanism Block 8
2-3. Main Board 8
2-4. Heat Sink 9
2-5. Chassis (T) Sub Assy 9
2-6. Lever Section 10
2-7. Servo Board 10
2-8. Shaft Roller Assy 11
2-9. Floating Block Assy 11
2-10. Optical Pick-up Block 12

3. DIAGRAMS

3-1. IC Pin Description 13
3-2. Block Diagram –CD Section– 15
3-3. Block Diagram –Tuner Section– 16
3-4. Block Diagram –Display Section– 17
3-5. Circuit Boards Location 17
3-6. Printed Wiring Boards –CD Mechanism Section– 18
3-7. Schematic Diagram –CD Mechanism Section– 20
3-8. Printed Wiring Board –Main Section– 21
3-9. Schematic Diagram –Main Section (1/2)– 22
3-10. Schematic Diagram –Main Section (2/2)– 23
3-11. Printed Wiring Board –Display Section– 24
3-12. Schematic Diagram –Display Section– 25

4. EXPLODED VIEWS

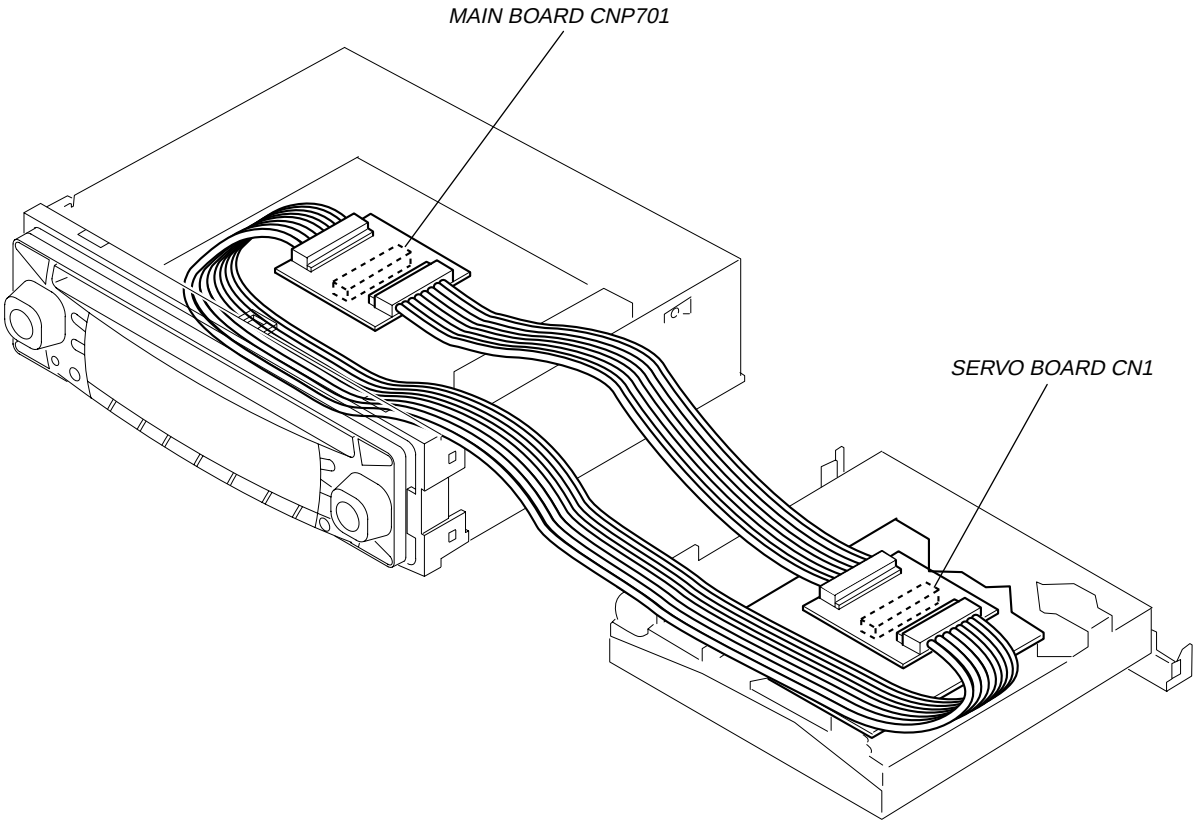
4-1. Chassis Section 28
4-2. Front panel Section 29
4-3. CD Mechanism Section (1) 30
4-4. CD Mechanism Section (2) 31
4-5. CD Mechanism Section (3) 32

5. ELECTRICAL PARTS LIST 33

EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

• Connect the MAIN board (CNP701) and the SERVO board (CN1) with the extension cable (Part No. J-2502-062-1).

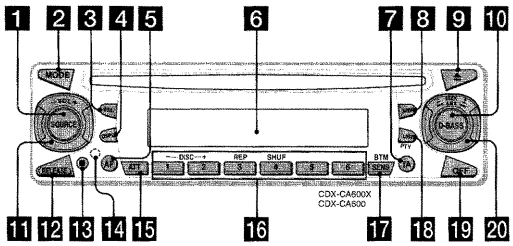


SECTION 1
GENERAL

This section is extracted from instruction manual.

(CDX-CA600/CA600X: AEP, UK model)

Location of controls



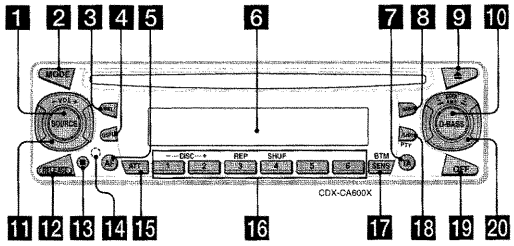
Refer to the pages listed for details.

1 SOURCE (Power on/Radio/CD/MD) button 9, 10, 12, 13, 16
2 MODE button 10, 12, 13, 16
3 SEL (select) button 9, 10, 11, 12, 18, 20, 21
4 DSPL (display mode change) button 9, 10, 12, 14
5 AF button 15, 16
6 Display window
7 TA button 16
8 MBP (My Best sound Position) button 21
9 ⏏ (eject) button 9
10 D-BASS button 21
11 VOL (volume) –/+ control dial 9, 11, 12, 16, 20
12 RELEASE (front panel release) button 8
13 Receptor for the card remote commander
14 RESET button (located on the front side of the unit, behind the front panel) 7
15 ATT (attenuate) button 20
16 Number buttons 10, 13, 15, 16, 18, 20
① DISC – 10
② DISC + 10
③ REP 11
④ SHUF 11
17 SENS/BTM button 13, 14, 16
18 LIST/PTY (programme type) button 11, 12, 17
19 OFF button* 8, 9
20 SEEK/AMS –/+ control dial 9, 12, 13, 14, 15, 17

* **Warning when installing in a car without an ACC (accessory) position on the ignition key switch**
Be sure to press (OFF) on the unit for 2 seconds to turn off the clock display after turning off the engine.
Otherwise, the clock display does not turn off and this causes battery drain.

(CDX-CA600X: E model)

Location of controls



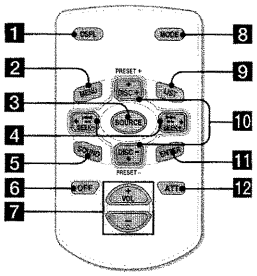
Refer to the pages listed for details.

1 SOURCE (Power on/Radio/CD/MD) button 9, 10, 12, 13, 16
2 MODE button 10, 12, 13, 16
3 SEL (select) button 9, 10, 11, 12, 18, 20, 21
4 DSPL (display mode change) button 9, 10, 12, 14
5 AF button 15, 16
6 Display window
7 TA button 16
8 MBP (My Best sound Position) button 21
9 ⏏ (eject) button 9
10 D-BASS button 21
11 VOL (volume) –/+ control dial 9, 11, 12, 16, 20
12 RELEASE (front panel release) button 8
13 Receptor for the card remote commander
14 RESET button (located on the front side of the unit, behind the front panel) 7
15 ATT (attenuate) button 20
16 Number buttons 10, 13, 15, 16, 18, 20
① DISC – 10
② DISC + 10
③ REP 11
④ SHUF 11
17 SENS/BTM button 13, 14, 16
18 LIST/PTY (programme type) button 11, 12, 17
19 OFF button* 8, 9
20 SEEK/AMS –/+ control dial 9, 12, 13, 14, 15, 17

* **Warning when installing in a car without an ACC (accessory) position on the ignition key switch**
Be sure to press (OFF) on the unit for 2 seconds to turn off the clock display after turning off the engine.
Otherwise, the clock display does not turn off and this causes battery drain.

(CDX-CA600/CA600X: AEP, UK model)

Card remote commander RM-X114 (optional)



The corresponding buttons of the card remote commander control the same functions as those on this unit.

1 DSPL button
2 MENU button*
3 SOURCE button
4 SEEK (⏮/⏭) buttons
5 SOUND button (used as 3 SEL button for this unit)
6 OFF button
7 VOL (–/+) buttons
8 MODE button
9 LIST button
10 DISC/PRESET (⏫/⏬) buttons
11 ENTER button*
12 ATT button

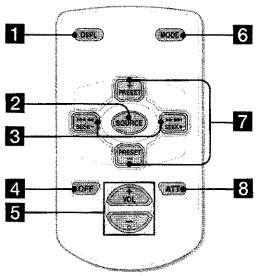
* Not available for this model

Note
If the unit is turned off by pressing (OFF) for 2 seconds, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

Tip
Refer to "Replacing the lithium battery" for details on how to replace the batteries (page 23).

(CDX-CA600X: E model)

Card remote commander RM-X115



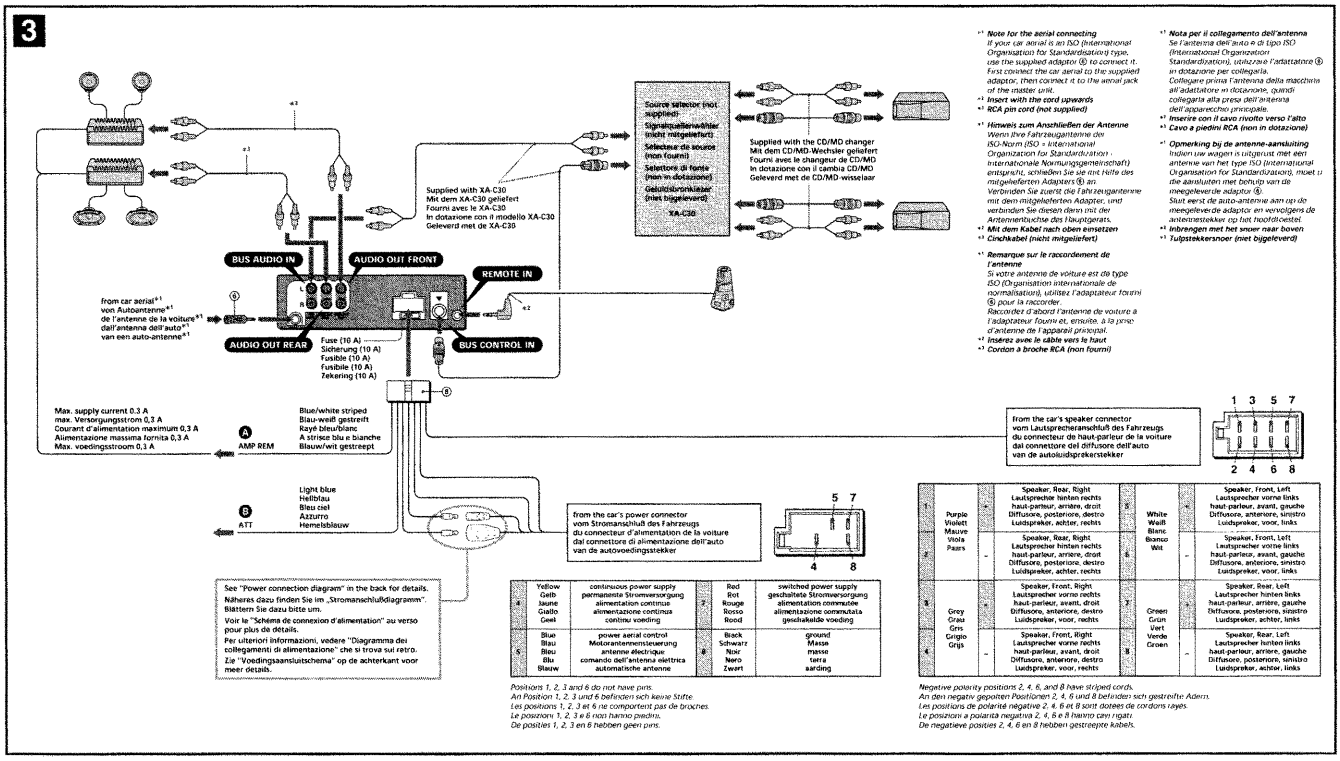
The corresponding buttons of the card remote commander control the same functions as those on this unit.

1 DSPL button
2 SOURCE button
3 SEEK (–/+) buttons
4 OFF button
5 VOL (+/–) buttons
6 MODE button
7 DISC/PRESET (+/–) buttons
8 ATT button

Note
If the unit is turned off by pressing (OFF) for 2 seconds, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

Tip
Refer to "Replacing the lithium battery" for details on how to replace the batteries (page 23).

Connections (CDX-CA600/CA600X: AEP, UK model)


3
Source selector (not supplied)
Signalquellenwähler (nicht mitgeliefert)
Sélecteur de source (non fourni)
Selettore di fonte (non in dotazione)
Geluidsbronkiezer (niet bijgeleverd)
XA-C30
Supplied with the CD/MD changer
Mit dem CD/MD-Wechsler geliefert
Fourni avec le changeur de CD/MD
In dotazione con il cambia CD/MD
Geleverd met de CD/MD-wisselaar
Supplied with XA-C30
Mit dem XA-C30 geliefert
Fourni avec le XA-C30
In dotazione con il modello XA-C30
Geleverd met de XA-C30
BUS AUDIO IN
AUDIO OUT FRONT
REMOTE IN
AUDIO OUT REAR
BUS CONTROL IN
Fuse (10 A)
Sicherung (10 A)
Fusible (10 A)
Fusibile (10 A)
Zekering (10 A)
from car aerial*1
von Autoantenne*1
de l'antenne de la voiture*1
dall'antenna dell'auto*1
van een auto-antenne*1
Max. supply current 0.3 A
max. Versorgungsstrom 0,3 A
Courant d'alimentation maximum 0,3 A
Alimentazione massima fornita 0,3 A
Max. voedingsstroom 0,3 A
A AMP REM
Blue/white striped
Blau-weiß gestreift
Rayé bleu/blanc
A strisce blu e bianche
Blauw/wit gestreept
B ATT
Light blue
Hellblau
Bleu ciel
Azzurro
Hemelsblauw
from the car's power connector
vom Stromanschluß des Fahrzeugs
du connecteur d'alimentation de la voiture
dal connettore di alimentazione dell'auto
van de autovoedingsstekker
5 7
4 8
from the car's speaker connector
vom Lautsprecheranschluß des Fahrzeugs
du connecteur de haut-parleur de la voiture
dal connettore dei diffusore dell'auto
van de autoluidsprekerstekker
1 3 5 7
2 4 6 8
See "Power connection diagram" in the back for details.
Näheres dazu finden Sie im „Stromanschlußdiagramm". Blättern Sie dazu bitte um.
Voir le "Schéma de connexion d'alimentation" au verso pour plus de détails.
Per ulteriori informazioni, vedere "Diagramma dei collegamenti di alimentazione" che si trova sul retro.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.
4 Yellow Gelb Jaune Giallo Geel — continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding
3 Red Rot Rouge Rosso Rood — switched power supply geschaltete Stromversorgung alimentation commutée alimentazione comandata geschakelde voeding
5 Blue Blau Bleu Blu Blauw — power aerial control Motorantennensteuerung antenne électrique comando dell'antenna elettrica automatische antenne
8 Black Schwarz Noir Nero Zwart — ground Masse masso terra aarding
1 Purple Violett Mauve Viola Paars — Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts
2 – Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts
6 White Weiß Blanc Bianco Wit — Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
6 – Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
8 Grey Grau Gris Grigio Grijs — Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts
8 – Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts
7 Green Grün Vert Verde Groen — Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
7 – Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
Positions 1, 2, 3 and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posities 1, 2, 3 en 6 hebben geen pins.
Negative polarity positions 2, 4, 6, and 8 have striped cords.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De negatieve posities 2, 4, 6 en 8 hebben gestreepte kabels.

*1 **Note for the aerial connecting**
If your car aerial is an ISO (International Organisation for Standardisation) type, use the supplied adaptor Ⓑ to connect it. First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
*2 **Insert with the cord upwards**
*3 **RCA pin cord (not supplied)**

*1 **Hinweis zum Anschließen der Antenne**
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mit Hilfe des mitgelieferten Adapters Ⓑ an. Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter, und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
*2 **Mit dem Kabel nach oben einsetzen**
*3 **Cinchkabel (nicht mitgeliefert)**

*1 **Remarque sur le raccordement de l'antenne**
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni Ⓑ pour la raccorder.
Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
*2 **Insérez avec le câble vers le haut**
*3 **Cordon à broche RCA (non fourni)**

*1 **Nota per il collegamento dell'antenna**
Se l'antenna dell'auto è di tipo ISO (International Organization for Standardization), utilizzare l'adattatore Ⓑ in dotazione per collegarla.
Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
*2 **Inserire con il cavo rivolto verso l'alto**
*3 **Cavo a piedini RCA (non in dotazione)**

*1 **Opmerking bij de antenne-aansluiting**
Indien uw wagen is uitgerust met een antenne van het type ISO (International Organisation for Standardisation), moet u de aansluiten met behulp van de meegeleverde adaptor Ⓑ.
Sluit eerst de auto-antenne aan op de meegeleverde adaptor en vervolgens de antennestekker op het hoofdtoestel.
*2 **Inbrengen met het snoer naar boven**
*3 **Tuigstekersnoer (niet bijgeleverd)**

Connection diagram (3)

Ⓐ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

Ⓑ **To the interface cable of a car telephone**

Warning
If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord Ⓑ may damage the aerial.

Notes on the control leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

Anschlußdiagramm (3)

Ⓐ **An AMP REMOTE IN des gesondert erhältlichen Endverstärkers**
Dieser Anschluß ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.

Ⓑ **An Schnittstellenkabel eines Autotelefons**

Warnung
Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel Ⓑ die Antenne beschädigt werden.

Hinweise zu den Steuerleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert + 12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzsuche) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluß des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluß
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis, und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluß.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da diese sonst beschädigt werden können.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Schéma de connexion (3)

Ⓐ **Au niveau du AMP REMOTE IN d'un amplificateur de puissance facultatif**
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.

Ⓑ **Vers le cordon de liaison d'un téléphone de voiture**

Avertissement
Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni Ⓑ risque d'endommager l'antenne.

Remarques sur les fils de commande
- *Le fil de commande (bleu) fournit du courant continu de +12 V lorsque vous allumez le sélecteur de canaux ou lorsque vous activez la fonction TA (informations circulation) en AF (fréquence alternative).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW/LW intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) au borner de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Connexion pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur la connexion des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas raccorder le câble de masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Ne pas connecter d'enceintes acoustiques actives (avec amplificateurs intégrés) aux bornes d'enceinte de cet appareil, pour éviter d'endommager les enceintes. Veiller à raccorder des enceintes passives.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil dispose d'un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Schema di collegamento (3)

Ⓐ **A AMP REMOTE IN di un amplificatore di potenza opzionale**
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.

Ⓑ **Al cavo interfaccia di un telefono per auto**

Avvertenza
Quando si collega l'apparecchio con il cavo di alimentazione in dotazione Ⓑ, si potrebbe danneggiare l'antenna elettrica se questa non ha la scatola di relè.

Note sul cavi di controllo
- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore o le funzioni TA (notiziario sul traffico) e AF (frequenza alternativa).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione opzionale al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola di relè con questo apparecchio.*

Collegamento per la conservazione della memoria
Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, onde evitare che vengano danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali dei diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poiché il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Aansluitschema (3)

Ⓐ **Naar AMP REMOTE IN van een los verkrijgbare vermogensversterker**
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het toestel worden beschadigd.

Ⓑ **Naar het interface-snoer van een autotelefoon**

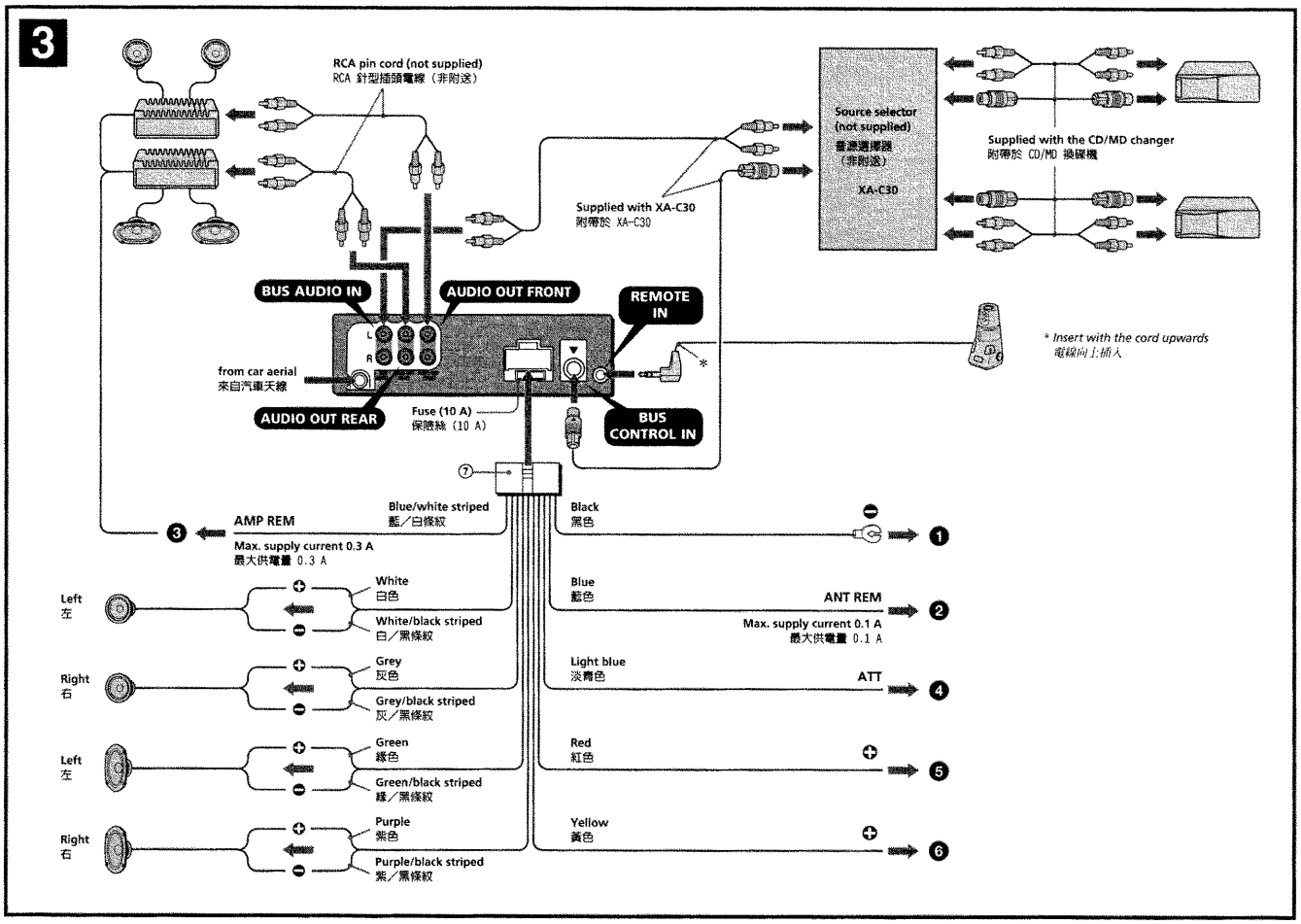
Opgelet
Indien u een elektrische antenne heeft zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer Ⓑ de antenne beschadigen.

Opmerking betreffende de aansluitsnoeren
- *De antennevoedingskabel (blauw) levert +12 V gelijkstroom wanneer u de tuner aanschakelt of de AF (Alternative Frequency), TA (Traffic Announcement) functie gebruikt.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruit/voorruit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaishuis te gebruiken.*

Instandhouden van het geheugen
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.*
- *Verbind de massakabel van dit toestel met met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter en linker luidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

Connections (CDX-CA600X: E model)



Connection diagram (3)

1. **To a metal surface of the car**
   First connect the black earth lead, then connect the yellow and red power input leads.
2. **To the power aerial control lead or power supply lead of aerial booster amplifier**
   Notes
   - *It is not necessary to connect this lead if there is no power aerial or aerial booster, or with a manually-operated telescopic aerial.*
   - *When your car has a built-in FM/MW/LW aerial in the rearlside glass, see "Notes on the control and power supply leads."*
3. **To AMP REMOTE IN of an optional power amplifier**
   This connection is only for amplifiers. Connecting any other system may damage the unit.
4. **To the interface cable of a car telephone**
5. **To the +12 V power terminal which is energized in the accessory position of the ignition key switch**
   Notes
   - *If there is no accessory position, connect to the +12 V power (battery) terminal which is energised at all times.*
     Be sure to connect the black earth lead to it first.
   - *When your car has a built-in FM/MW/LW aerial in the rearlside glass, see "Notes on the control and power supply leads."*
6. **To the +12 V power terminal which is energised at all times**
   Be sure to connect the black earth lead to it first.

Notes on the control and power supply leads

- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rearlside glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without relay box cannot be used with this unit.*

Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

線路連接圖（3）

1. **至汽車的金屬部位**
   首先連接黑色接地導線，然後再連接黃色和紅色電源輸入導線。
2. **至電動天線控制導線或天線升壓放大器的電源導線柱**
   - *如無電動天線，天線增壓器，或用手操作的套管式天線，便不須連接此導線。*
   - *您的汽車的後／側玻璃窗中如果內裝有 FM/MW/LW 天線，即請參看"控制和電源線須知"。*
3. **至選購的功率放大器的 AMP REMOTE IN（放大器遙控輸入）**
   本連接僅用於放大器。連接任何其它系統可能會損壞本機。
4. **至汽車電話的接口電纜**
5. **至在點火鑰匙的輔助位置上通電的 +12 V 電源端子柱**
   - *若沒有輔助位置，則請連接至常時通電的 +12 V 電源（電池）端子。*
     務請首先將黑色接地導線與其連接。
   - *您的汽車的後／側玻璃窗中如果內裝有 FM/MW/LW 天線，即請參看"控制和電源線須知"。*
6. **至隨時都通電的 +12 V 電源端子**
   務請首先將黑色接地導線與其連接。

控制和電源線須知

- *當您打開調諧器或啓動 AF（變換頻率）或 TA（交通公告）功能時，電源天線控制導線（藍色）提供 +12 V 直流電。*
- *若您的汽車後／側玻璃窗上有內置 FM/MW/LW 天線，須將電動天線控制導線（藍色）或輔助電源輸入導線（紅色）連接到現有天線放大器上的電源端子上。詳細內容請向銷售商諮詢。*
- *本機不能使用不具備繼電箱的電動天線。*

保持記憶的線路連接法

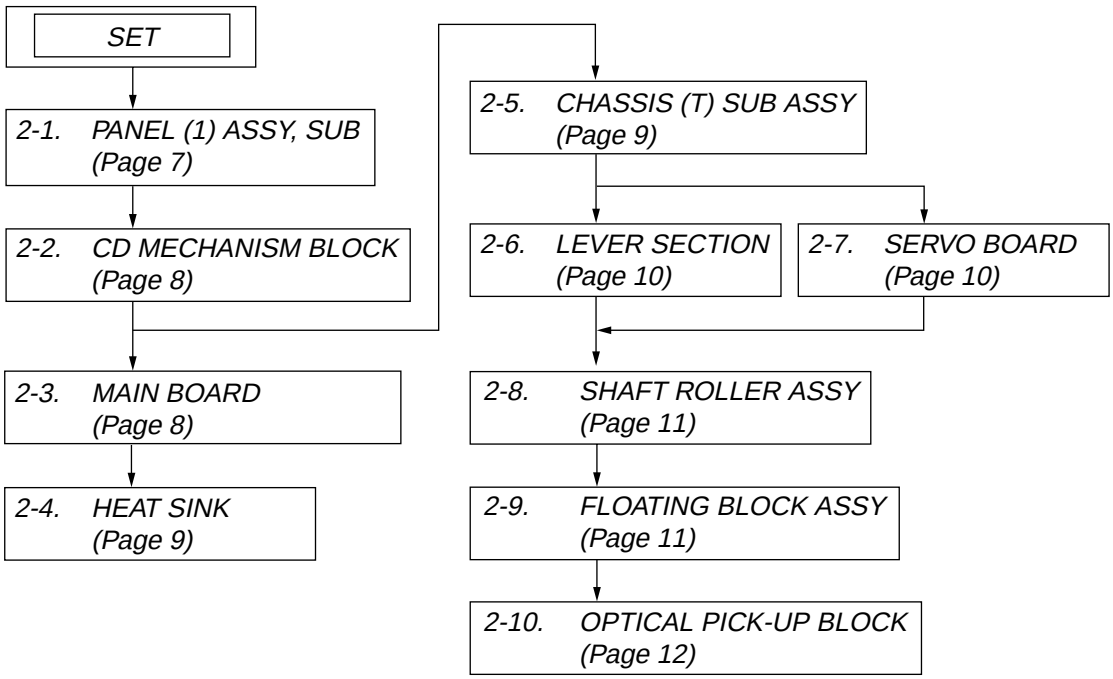
當連接好黃色電源輸入導線時，即使汽車發動機點火鑰匙被轉在電源切斷之處，電源仍繼續將電流供給記憶用電路，以保持所記憶著的數據。

連接揚聲器時的注意事項

- *連接揚聲器電線以前，請先切斷本機電源。*
- *使用阻抗爲 4~8Ω 且具有充分功率處理容量的揚聲器，以免損壞揚聲器。*
- *不要將揚聲器端子連接到汽車底盤上或將右揚聲器端子與左揚聲器端子相連接。*
- *切勿將本機的接地導線連接至揚聲器的負(–)接線柱。*
- *揚聲器不可以並聯連接。*
- *請僅連接無源揚聲器。若將有源揚聲器（帶內置放大器）連接到揚聲器端子上會損壞本機。*
- *若本裝置使用左、右揚聲器的共用(–)極導線，爲了避免故障，切勿使用已安裝在汽車內的內置揚聲器導線。*
- *請勿將本裝置揚聲器導線相互連接。*

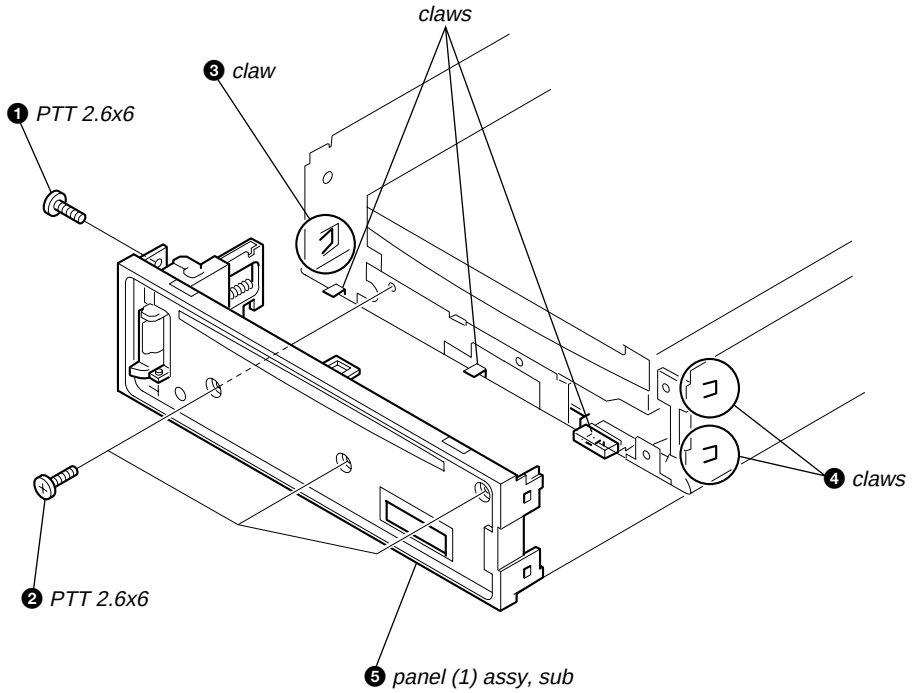
SECTION 2
DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

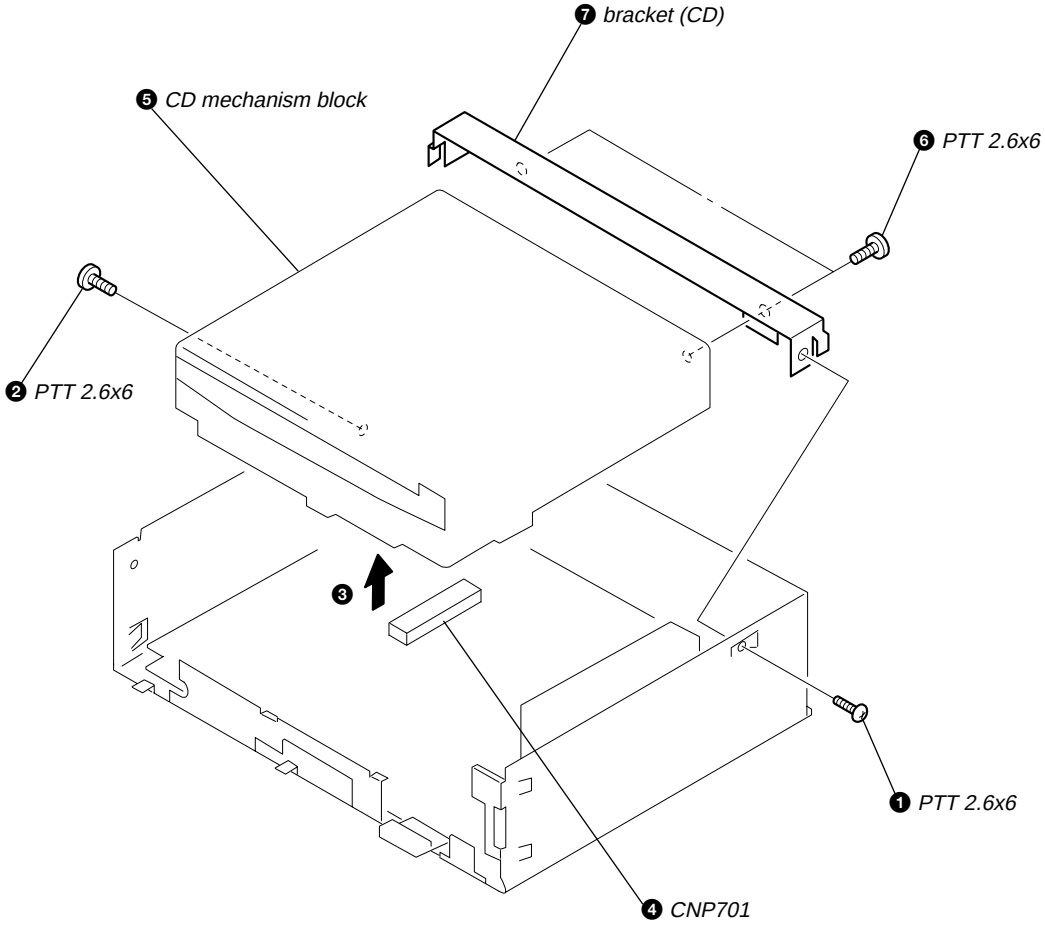

SET
2-1. PANEL (1) ASSY, SUB (Page 7)
2-2. CD MECHANISM BLOCK (Page 8)
2-3. MAIN BOARD (Page 8)
2-4. HEAT SINK (Page 9)
2-5. CHASSIS (T) SUB ASSY (Page 9)
2-6. LEVER SECTION (Page 10)
2-7. SERVO BOARD (Page 10)
2-8. SHAFT ROLLER ASSY (Page 11)
2-9. FLOATING BLOCK ASSY (Page 11)
2-10. OPTICAL PICK-UP BLOCK (Page 12)

Note : Follow the disassembly procedure in the numerical order given.

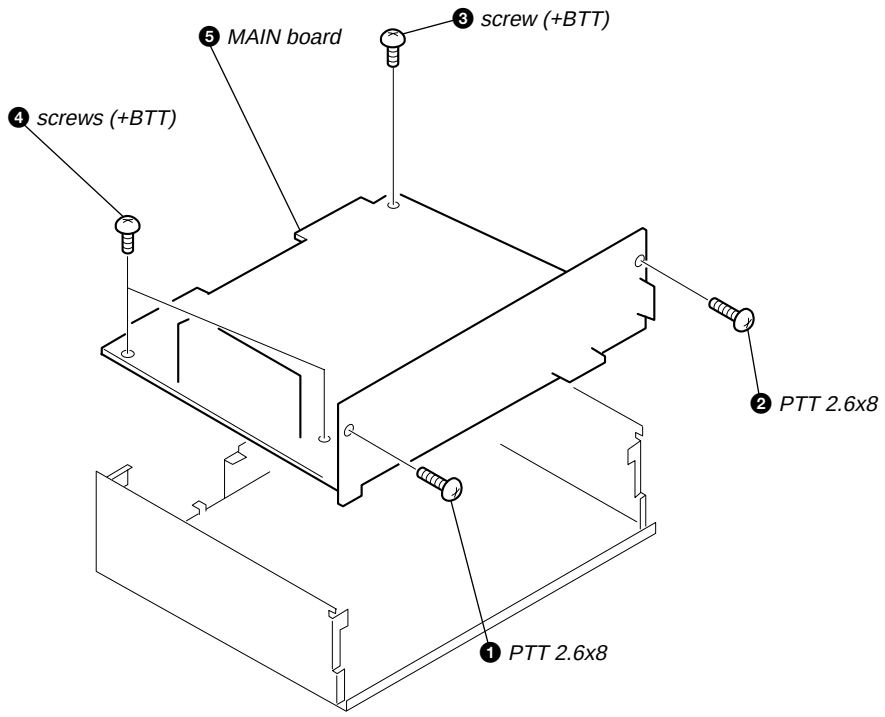
2-1. PANEL (1) ASSY, SUB



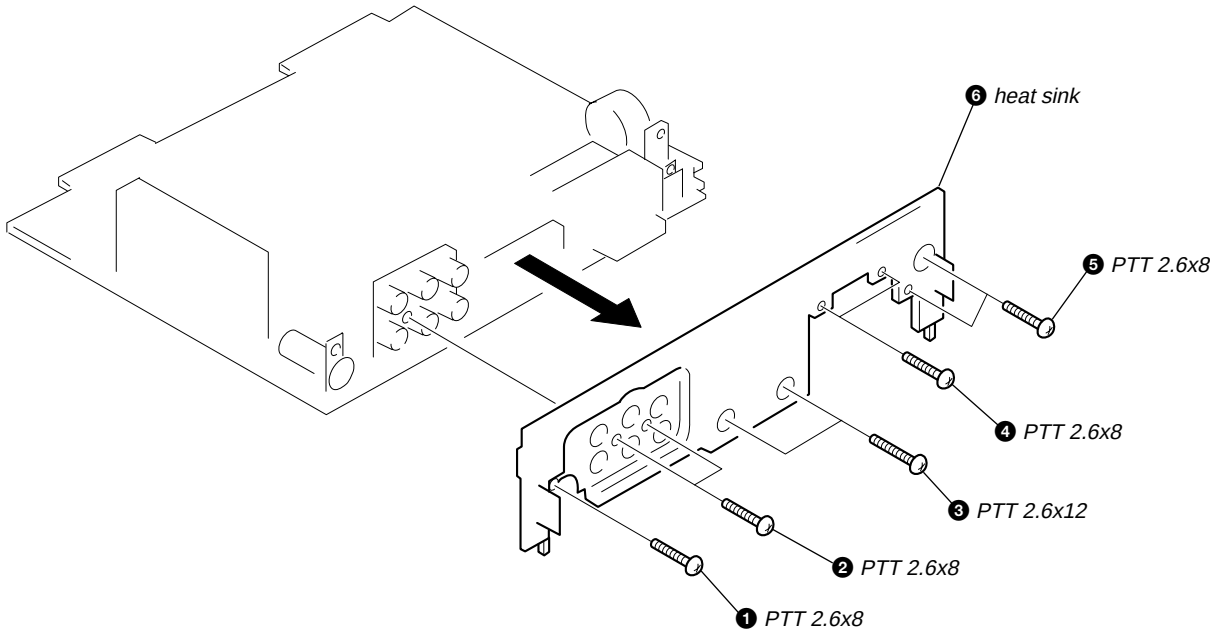
2-2. CD MECHANISM BLOCK



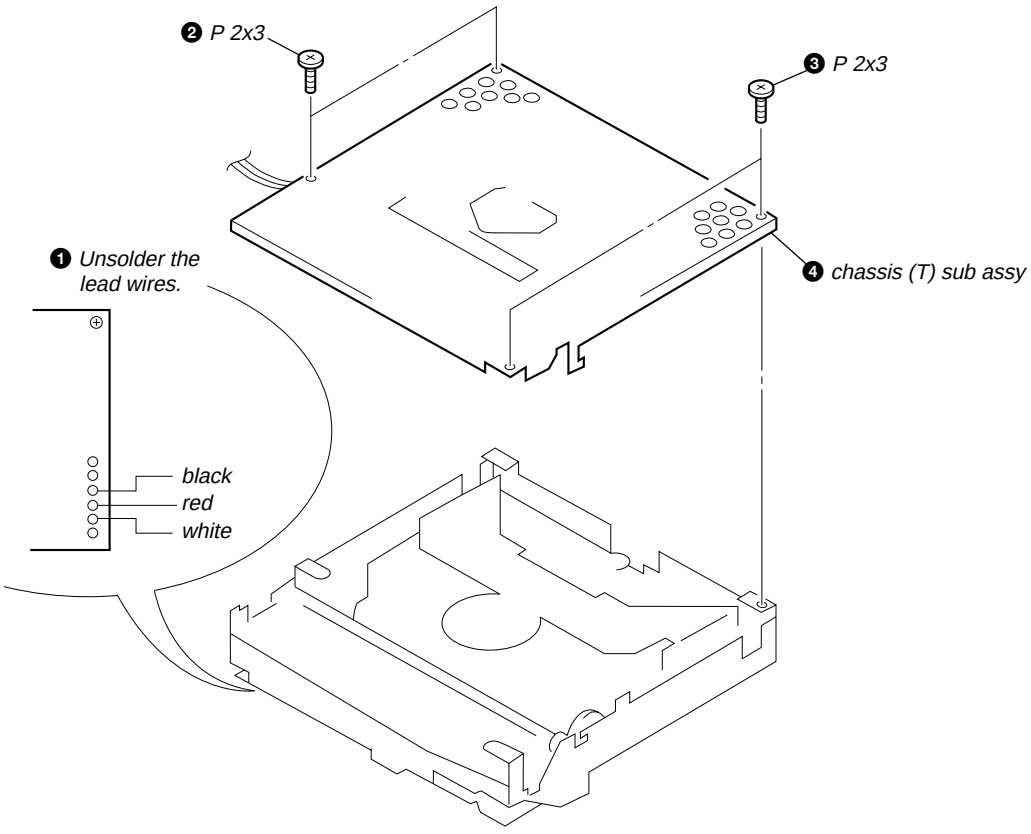
2-3. MAIN BOARD



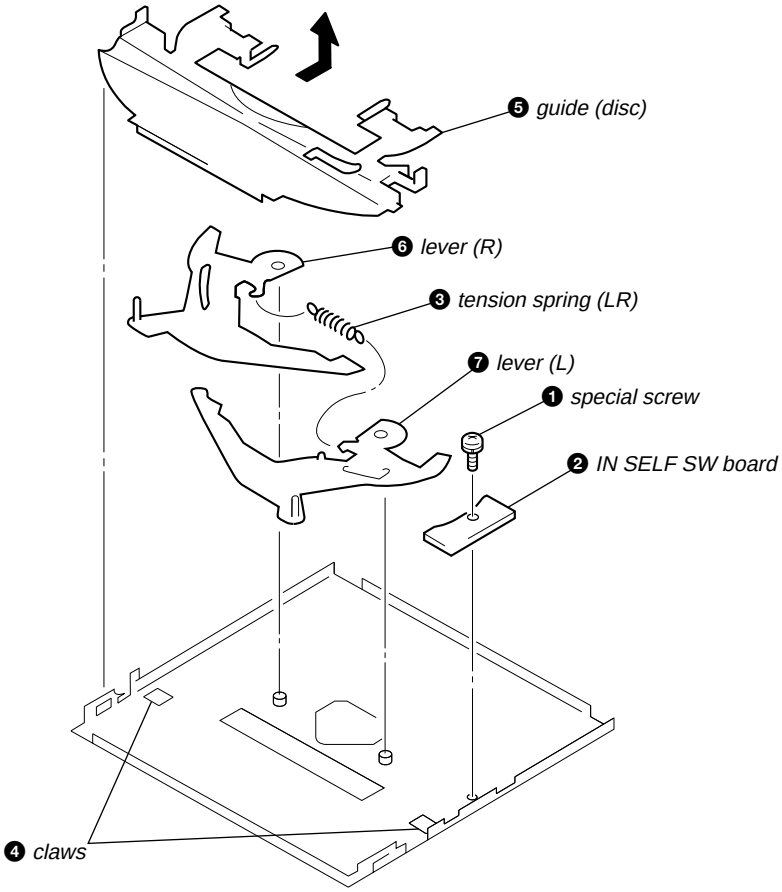
2-4. HEAT SINK



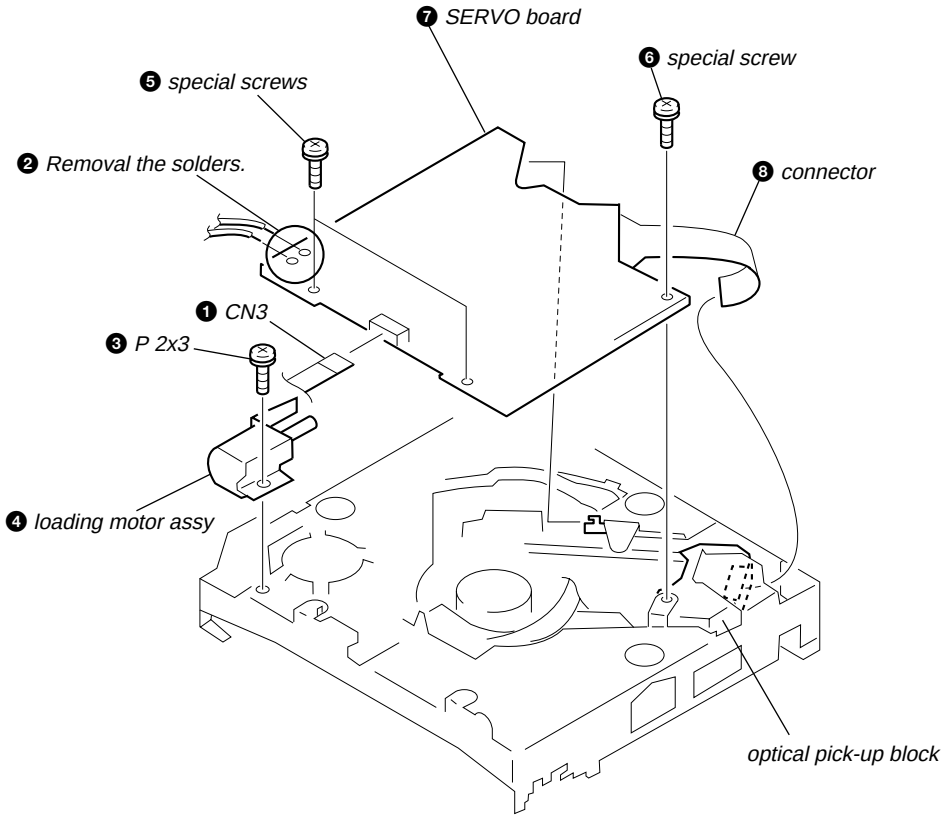
2-5. CHASSIS (T) SUB ASSY



2-6. LEVER SECTION



2-7. SERVO BOARD



2-8. SHAFT ROLLER ASSY

• When installing, take note of the positions arm (roller) and washers. (Fig. 1)

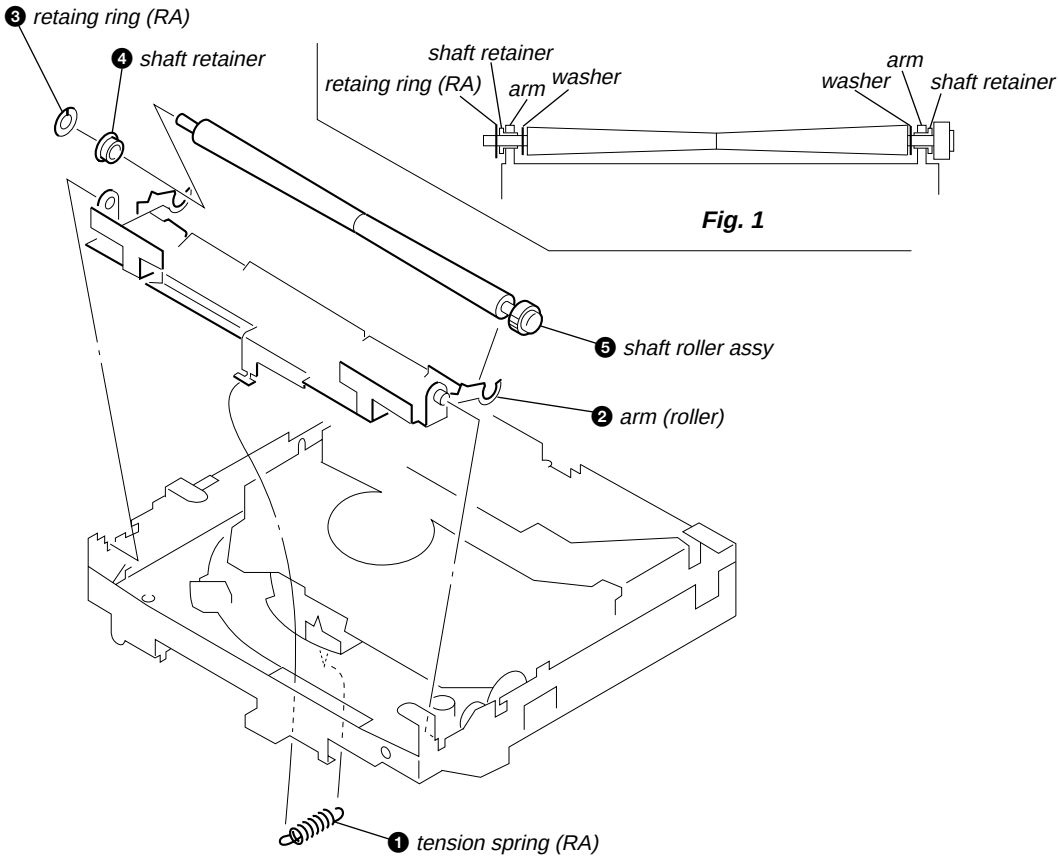
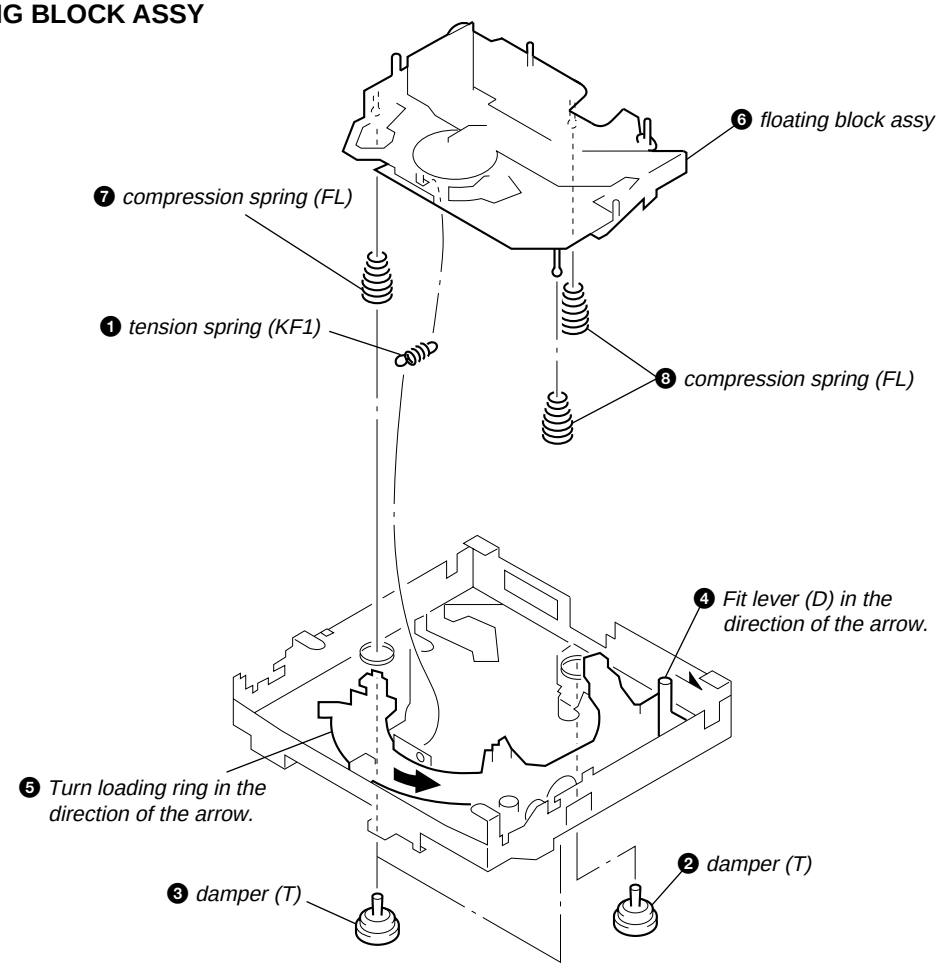
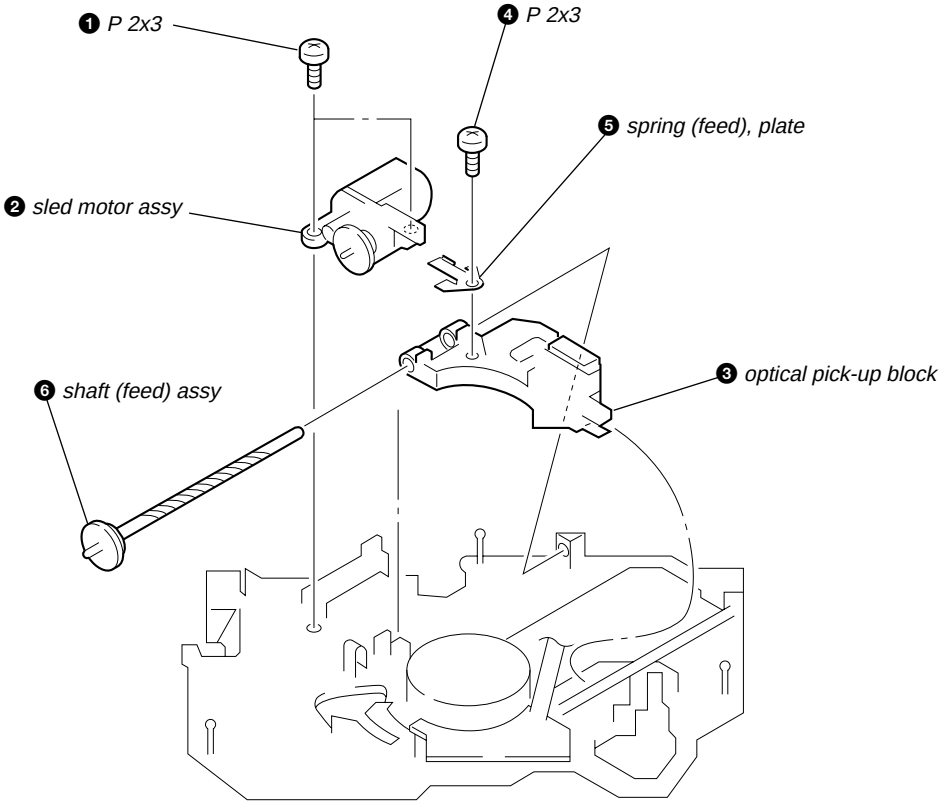


Fig. 1

2-9. FLOATING BLOCK ASSY


❻ floating block assy
❼ compression spring (FL)
❶ tension spring (KF1)
❽ compression spring (FL)
❹ Fit lever (D) in the direction of the arrow.
❺ Turn loading ring in the direction of the arrow.
❷ damper (T)
❸ damper (T)

2-10. OPTICAL PICK-UP BLOCK



SECTION 3
DIAGRAMS

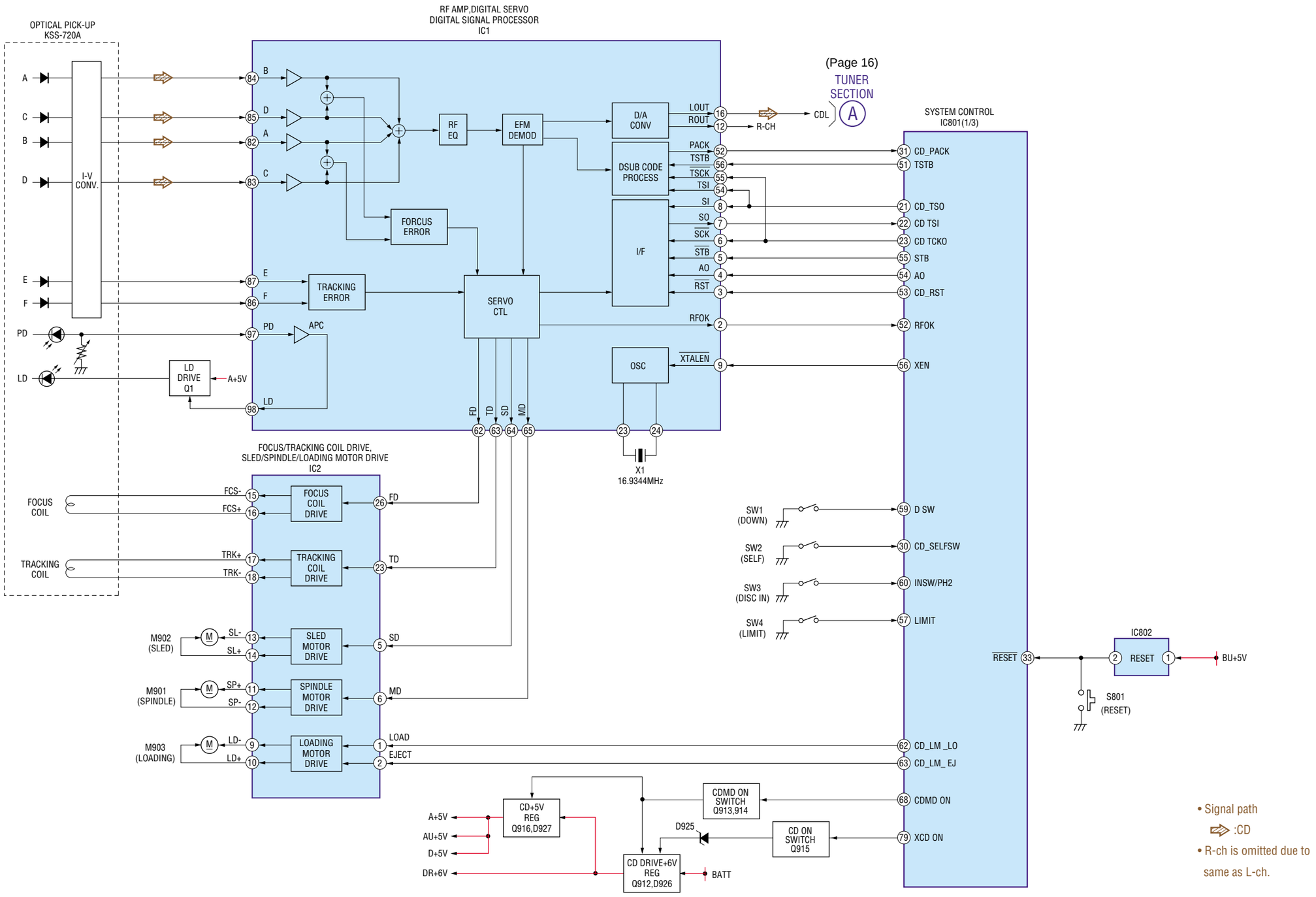
3-1. IC PIN DESCRIPTION

• IC801 MN101C49KCF (SYSTEM CONTROL)

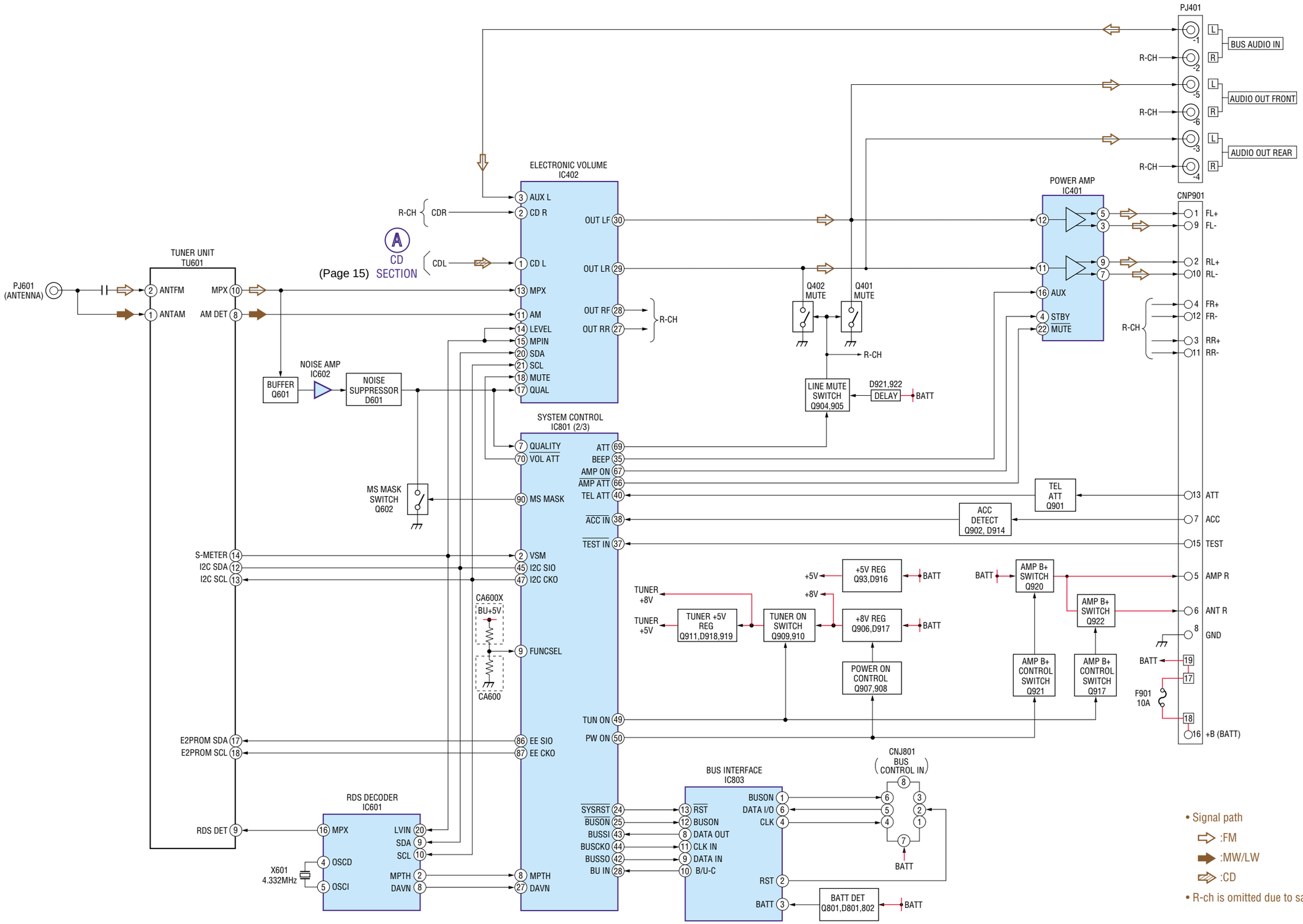
Pin No.	Pin Name	I/O	Pin Description
1	VREF–	—	Ground for A/D converter power supply
2	VSM	I	S-meter voltage detection signal input from tuner unit (TU601)
3	NC	I	Connect to ground.
4	KEYIN1	I	Key signal input
5	KEYIN0	I	Key signal input
6	RC IN0	I	Rotary commander key signal input from remote in jack (CNP801)
7	QUALITY	I	Noise detection signal input from RDS decoder (IC601)
8	MPTH	I	Multipass detection signal input
9	FUNCSEL	I	Destination set up detection signal input (“L”: CDX-CA600X, “H”: CDX-CA600)
10	VREF	—	A/D converter power supply
11	VDD	—	Power supply (+5 V) input pin
12	OSCOUT	O	High speed clock signal output (18.432 MHz)
13	OSCIN	I	High speed clock signal input (18.432 MHz)
14	VSS	—	Ground for power supply
15	XIN	I	Low speed clock signal input (32.768 kHz)
16	XOUT	O	Low speed clock signal output (32.768 kHz)
17	MMOD	I	Memory mode select signal input (Input to “Low” (single chip mode).) (Connect to ground.)
18	LCDSO	O	LCD serial data signal output to LCD driver (IC501)
19	LCDCE	O	LCD chip enable signal output to LCD driver (IC501)
20	LCDCKO	O	LCD serial clock signal output to LCD driver (IC501)
21	CD TSO	O	CD servo IC serial data signal output
22	CD TSI	I	CD servo IC serial data signal input
23	CD TCKO	O	CD servo IC serial clock signal output
24	$\overline{\text{SYSRST}}$	O	System reset signal output to bus interface (IC803)
25	$\overline{\text{BUS ON}}$	O	Bus on signal output to bus interface (IC803)
26	KEYACK	I	Key acknowledge detection signal input
27	DAVN	I	RDS data block sync detection signal input
28	BU IN	I	Back up power supply detection signal input
29	SIRCS	I	Remote signal input from remote control receiver (IC552)
30	CD SELFSW	I	CD mechanism self load position detection switch signal input from self switch (SW2)
31	CD PACK	I	CD text pack sync signal input from CD servo (IC1)
32	NIH	I	Connect to power supply.
33	RESET	I	microcomputer reset signal input from reset IC (IC802) “L”: reset
34	$\overline{\text{NOSESW}}$	I	Connect to power supply.
35	BEEP	O	Beep signal output to power amp (IC401)
36	NCO	O	Not used. (Open)
37	$\overline{\text{TESTIN}}$	I	Test mode detection signal input
38	$\overline{\text{ACCIN}}$	I	Accessory power supply detection signal input
39	NCO	O	Not used. (Open)
40	TELATT	I	Telephone ATT detection signal input
41	NIH	I	Connect to power supply.
42	BUSSO	O	Sony-Bus serial data signal output to bus interface (IC803)
43	BUSSI	I	Sony-Bus serial data signal input from bus interface (IC803)
44	BUSCKO	O	Sony-Bus serial clock signal output to bus interface (IC803)
45	I2CSIO	I/O	I2C bus serial data signal input/output
46	NCO	O	Not used. (Open)
47	I2CCKO	O	I2C bus serial clock signal output
48	NC	O	Not used. (Open)
49	TUNON	O	Tuner power supply control signal output
50	PW ON	O	System power supply control signal output

Pin No.	Pin Name	I/O	Pin Description
51	TSTB	O	CD text parameter strob signal output to servo IC (IC1)
52	RFOK	I	RF OK signal input from servo IC (IC1)
53	CD RST	O	Reset signal output to servo IC (IC1)
54	A0	O	Command/parameter identification signal output to servo IC (IC1) "L": Command, "H": Parameter
55	STB	O	Data strob signal output to servo IC (IC1)
56	X EN	O	Crystal oscillation control signal output to servo IC (IC1)
57	LIMIT	I	CD Mechanism in-limit switch signal input from limit switch (SW4)
58	PH1	I	CD Mechanism PH1 detection signal input Not used in this set.
59	D SW	I	CD Mechanism down switch signal input from down switch (SW1)
60	INSW/PH2	I	CD Mechanism disc-in switch detection signal input from disc-in switch (SW3)
61	PH3	I	CD Mechanism PH3 detection signal input Not used in this set.
62	CD LM LO	O	CD Mechanism loading motor control signal output to loading motor drive (IC2)
63	CD LM EJ	O	CD Mechanism eject motor control signal output to loading motor drive (IC2)
64, 65	NC	O	Not used. (Open)
66	$\overline{\text{AMPATT}}$	O	Power amp ATT control signal output to power amp (IC401)
67	AMPON	O	Power amp standby control signal output to power amp (IC401)
68	CDMD ON	O	CD mechanism deck power supply control signal output
69	ATT	O	System ATT control signal output
70	$\overline{\text{VOLATT}}$	O	Electrical volume ATT control signal output to electrical volume (IC402)
71 – 75	NC	O	Not used. (Open)
76	NC	I	Not used. (Open)
77	COL SEL	I	Color select switch signal input "H": Green, "L": Amber
78	NC	O	Not used. (Open)
79	XCD ON	O	CD on signal output "H": Play, "L": Loading or standby
80 – 85	NC	O	Not used. (Open)
86	EE SIO	I/O	EEPROM serial data signal input/output
87	EE CKO	O	EEPROM serial clock signal output
88	NC	O	Not used. (Open)
89	FLASH W	I	Flash microcomputer write detection signal input "L": Write mode
90	NS MASK	O	Noise mask signal output
91	$\overline{\text{AD ON}}$	O	Key power supply control signal output
92	DOORIND	O	Sub panel power supply control signal output Not used in this set. (Open)
93	ILLON	O	Illumination power supply control signal output
94	$\overline{\text{NOSE SW}}$	I	Front panel with/without detection signal input "L": Panel with, "H": Panel without
95	DAVSS	—	Ground pin
96	RE IN1	I	Rotary encoder signal input Not used in this set. (Open)
97	RE IN0	I	Rotary encoder signal input Not used in this set. (Open)
98	RC IN1	I	Rotary commander shift key signal input from remote in jack (CNP801) "L": Shift key on
99	NC	O	Not used. (Open)
100	DAVDD	—	Power supply pin (+5 V)

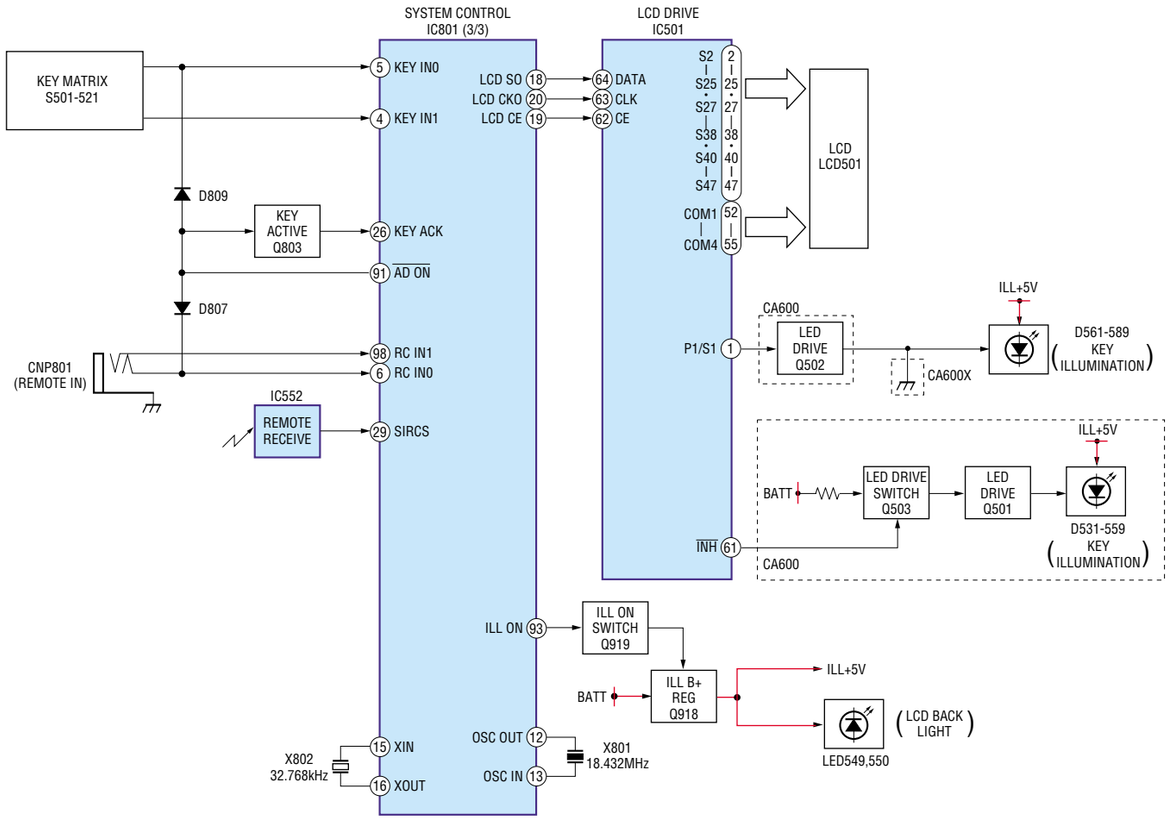
3-2. BLOCK DIAGRAM — CD SECTION —



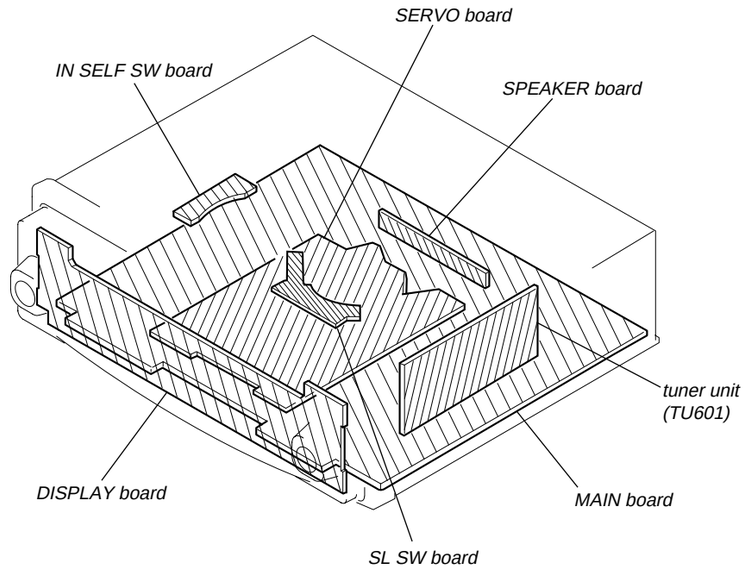
3-3. BLOCK DIAGRAM — TUNER SECTION —



3-4. BLOCK DIAGRAM — DISPLAY SECTION —



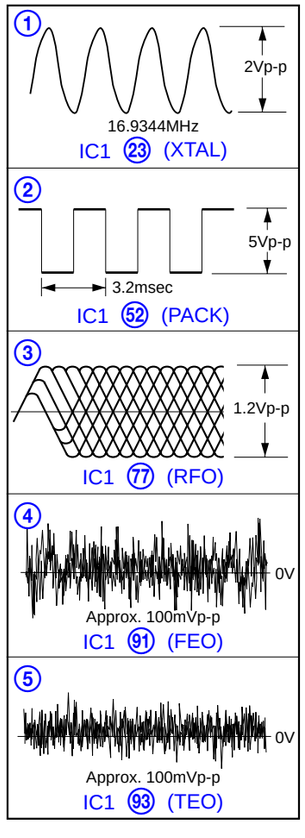
3-5. CIRCUIT BOARDS LOCATION



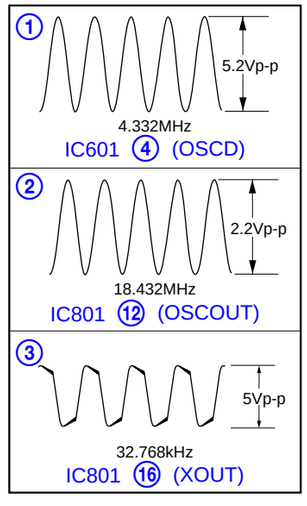
• Waveforms

— Servo Board —

(MODE: CD PLAY)



— Main Board —



3-6. PRINTED WIRING BOARDS — CD MECHANISM SECTION — • Refer to page 17 for Circuit Boards Location.

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for schematic diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ▭ : panel designation.

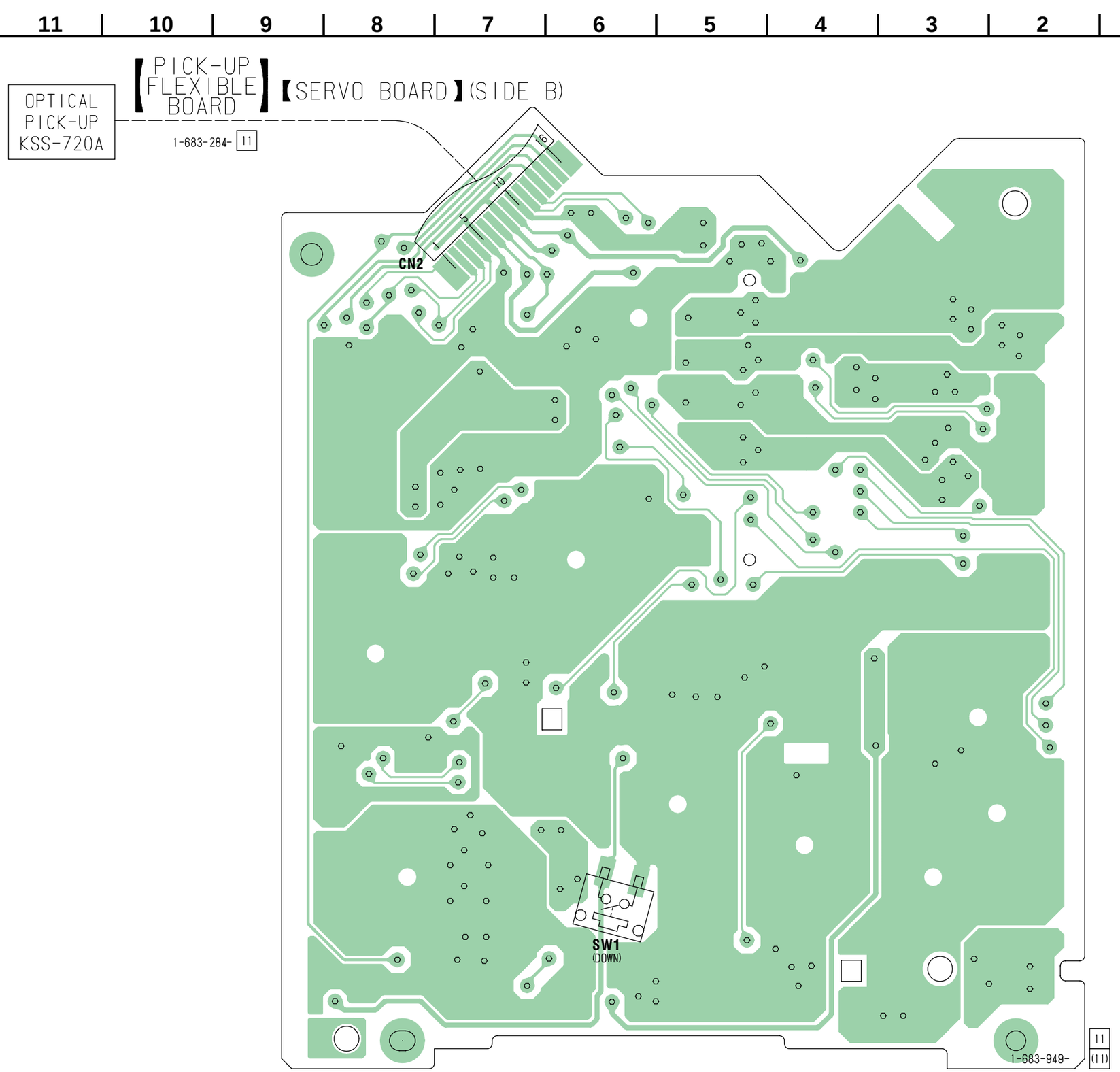
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : MW/LW
  - ⇨ : CD

for printed wiring boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.



【SERVO BOARD】(SIDE A)

【IN SELF SW BOARD】

【SL SW BOARD】

【MOTOR FLEXIBLE BOARD】 1-823-641- (11)

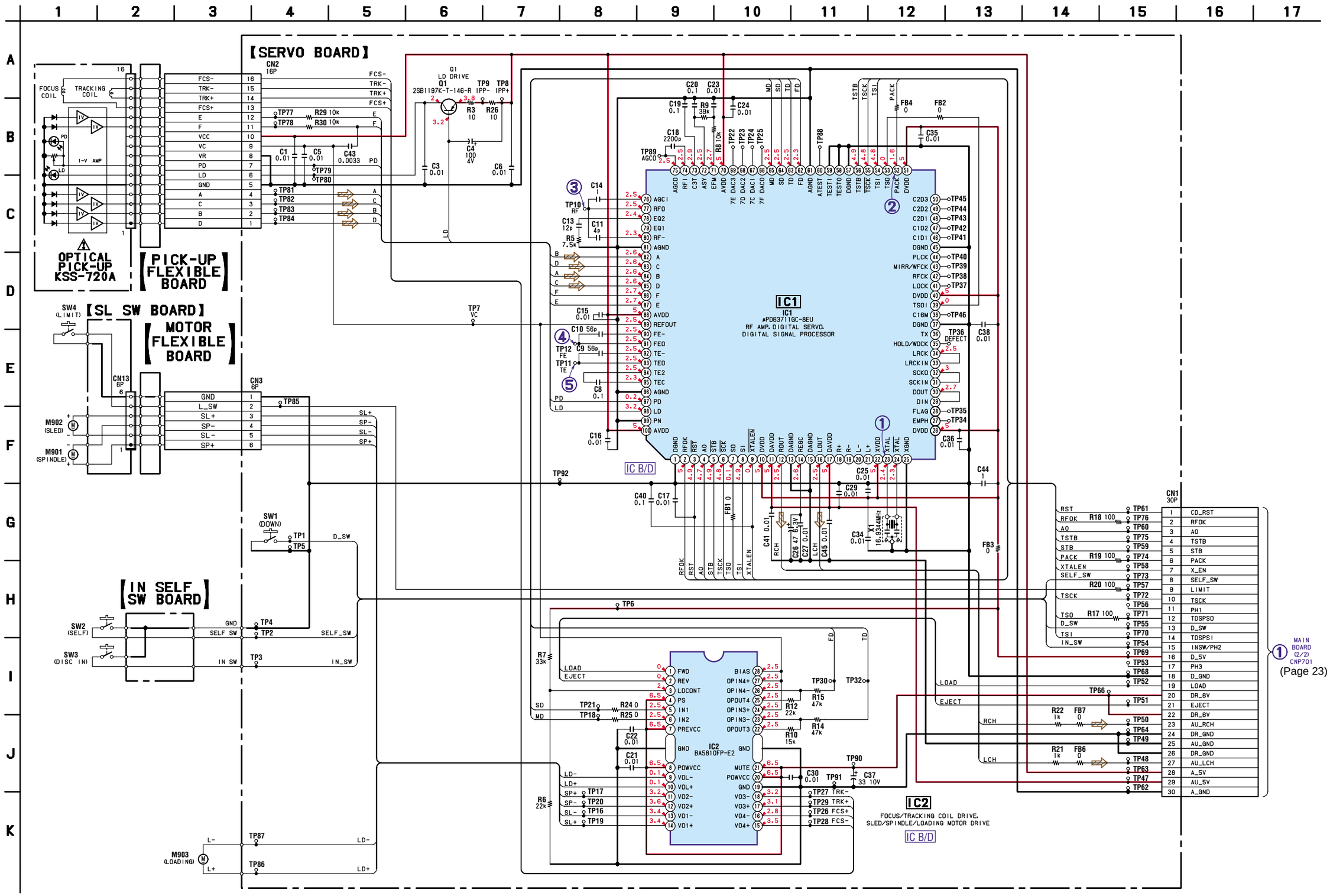
• **Semiconductor Location**

Ref. No.	Location
IC1	E-7
IC2	H-7
Q1	C-6

• Refer to page 17 for Waveforms.

3-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION —

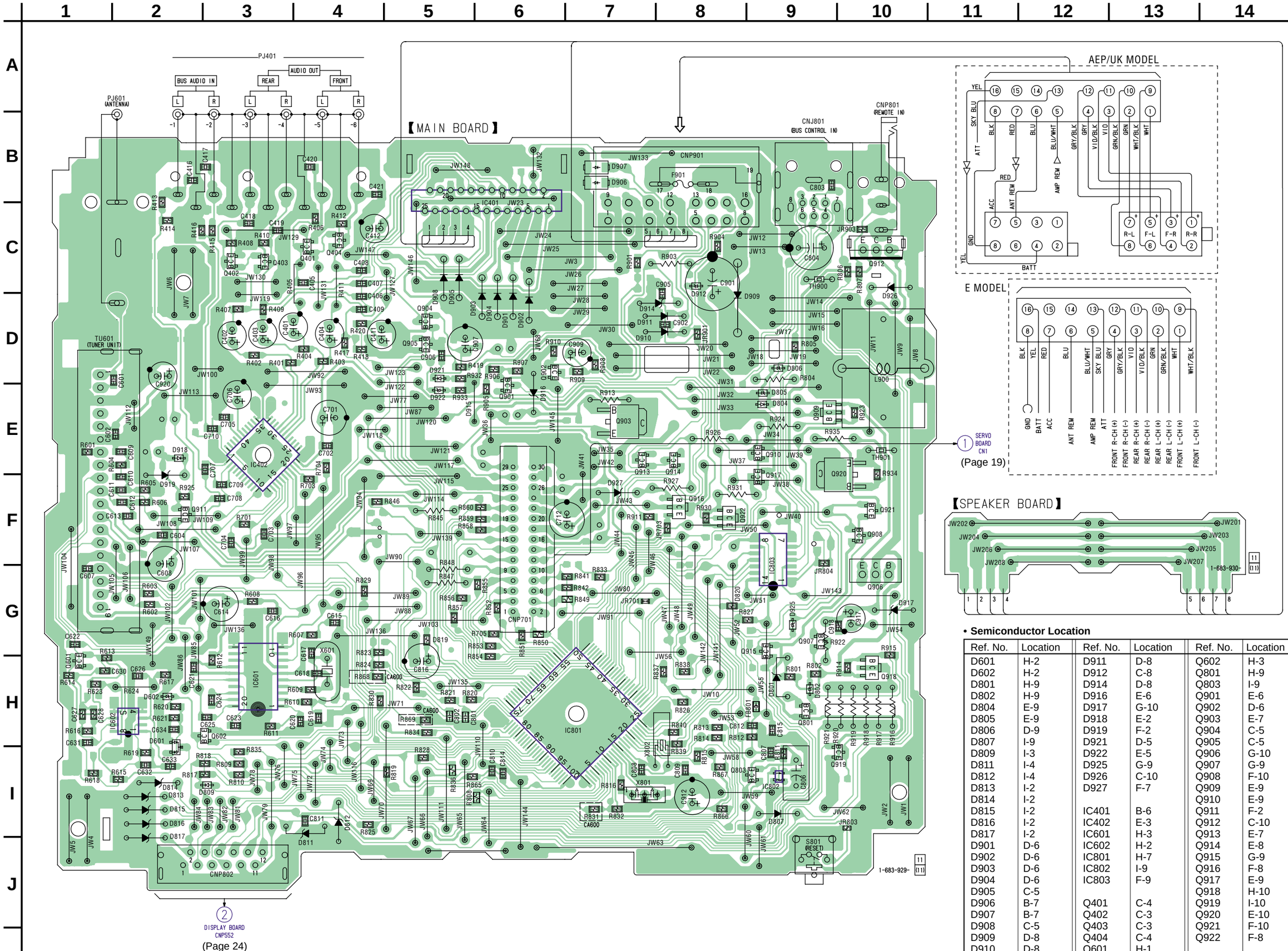
• Refer to page 26 for IC Block Diagrams.



Note:

- Voltage is dc with respect to ground under no-signal conditions.
  no mark : CD PLAY

3-8. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 17 for Circuit Boards Location.



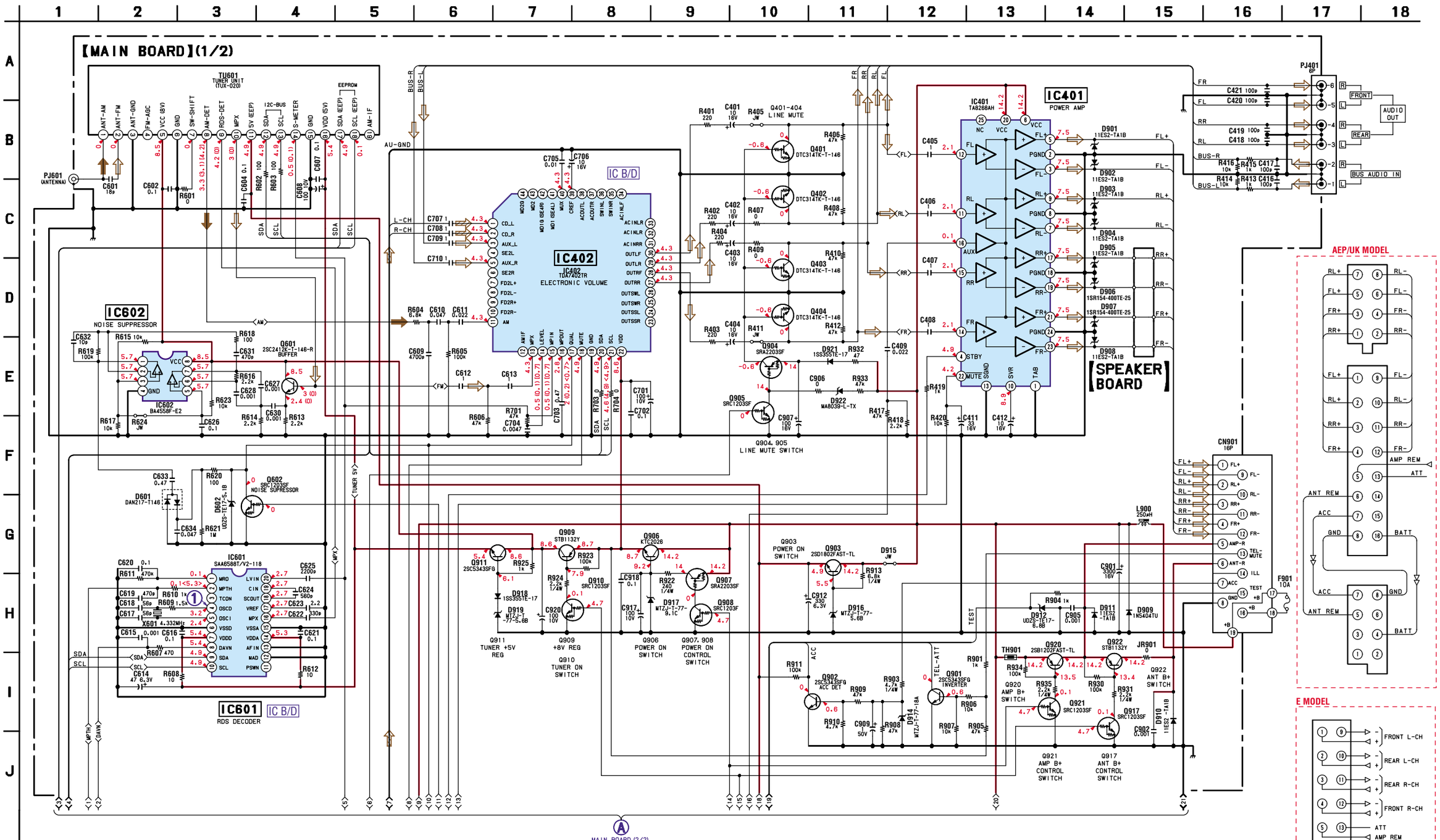
- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D601	H-2	D911	D-8	Q602	H-3
D602	H-2	D912	C-8	Q801	H-9
D801	H-9	D914	D-8	Q803	I-9
D802	H-9	D916	E-6	Q901	E-6
D804	E-9	D917	G-10	Q902	D-6
D805	E-9	D918	E-2	Q903	E-7
D806	D-9	D919	F-2	Q904	C-5
D807	I-9	D921	D-5	Q905	C-5
D809	I-3	D922	E-5	Q906	G-10
D811	I-4	D925	G-9	Q907	G-9
D812	I-4	D926	C-10	Q908	F-10
D813	I-2	D927	F-7	Q909	E-9
D814	I-2			Q910	E-9
D815	I-2	IC401	B-6	Q911	F-2
D816	I-2	IC402	E-3	Q912	C-10
D817	I-2	IC601	H-3	Q913	E-7
D901	D-6	IC602	H-2	Q914	E-8
D902	D-6	IC801	H-7	Q915	G-9
D903	D-6	IC802	I-9	Q916	F-8
D904	D-6	IC803	F-9	Q917	E-9
D905	C-5			Q918	H-10
D906	B-7	Q401	C-4	Q919	I-10
D907	B-7	Q402	C-3	Q920	E-10
D908	C-5	Q403	C-3	Q921	F-10
D909	D-8	Q404	C-4	Q922	F-8
D910	D-8	Q601	H-1		

• Refer to page 17 for Waveforms.

3-9. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) —

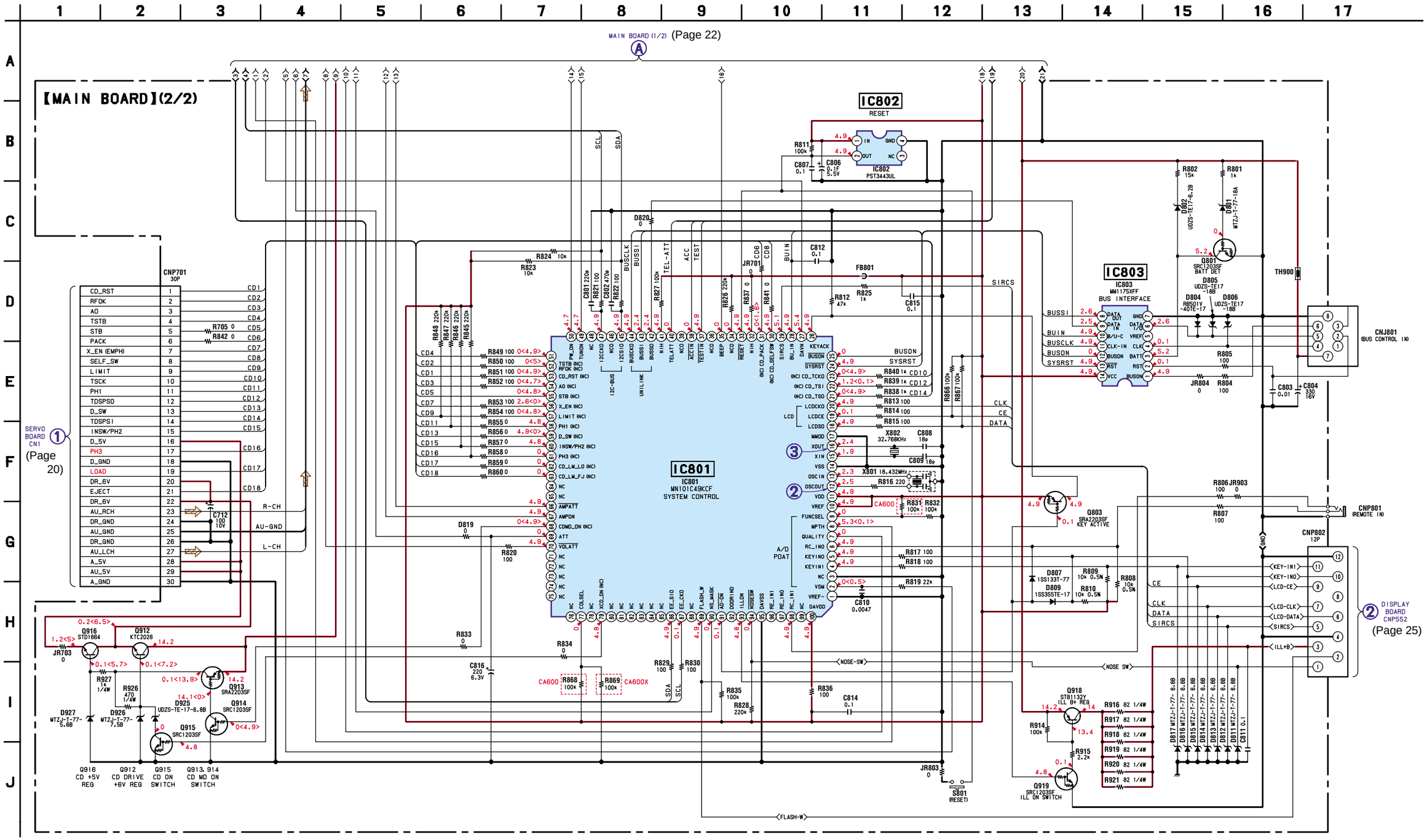
• Refer to page 26 for IC Block Diagrams.



Note:

- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : MW/LW
  < > : CD PLAY

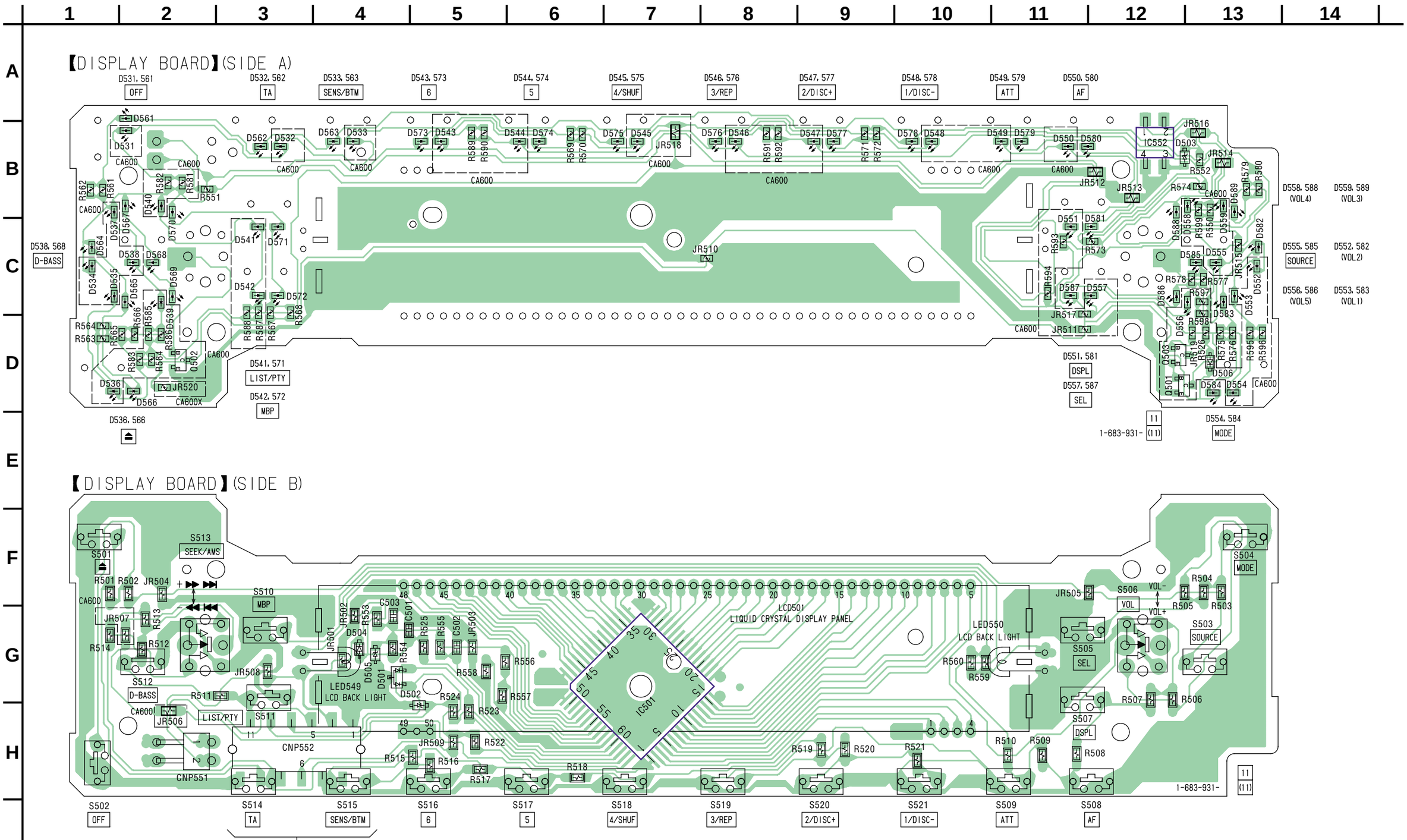
3-10. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 17 for Waveforms.



Note:

- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : MW/LW
  < > : CD PLAY

3-11. PRINTED WIRING BOARD — DISPLAY SECTION — • Refer to page 17 for Circuit Boards Location.



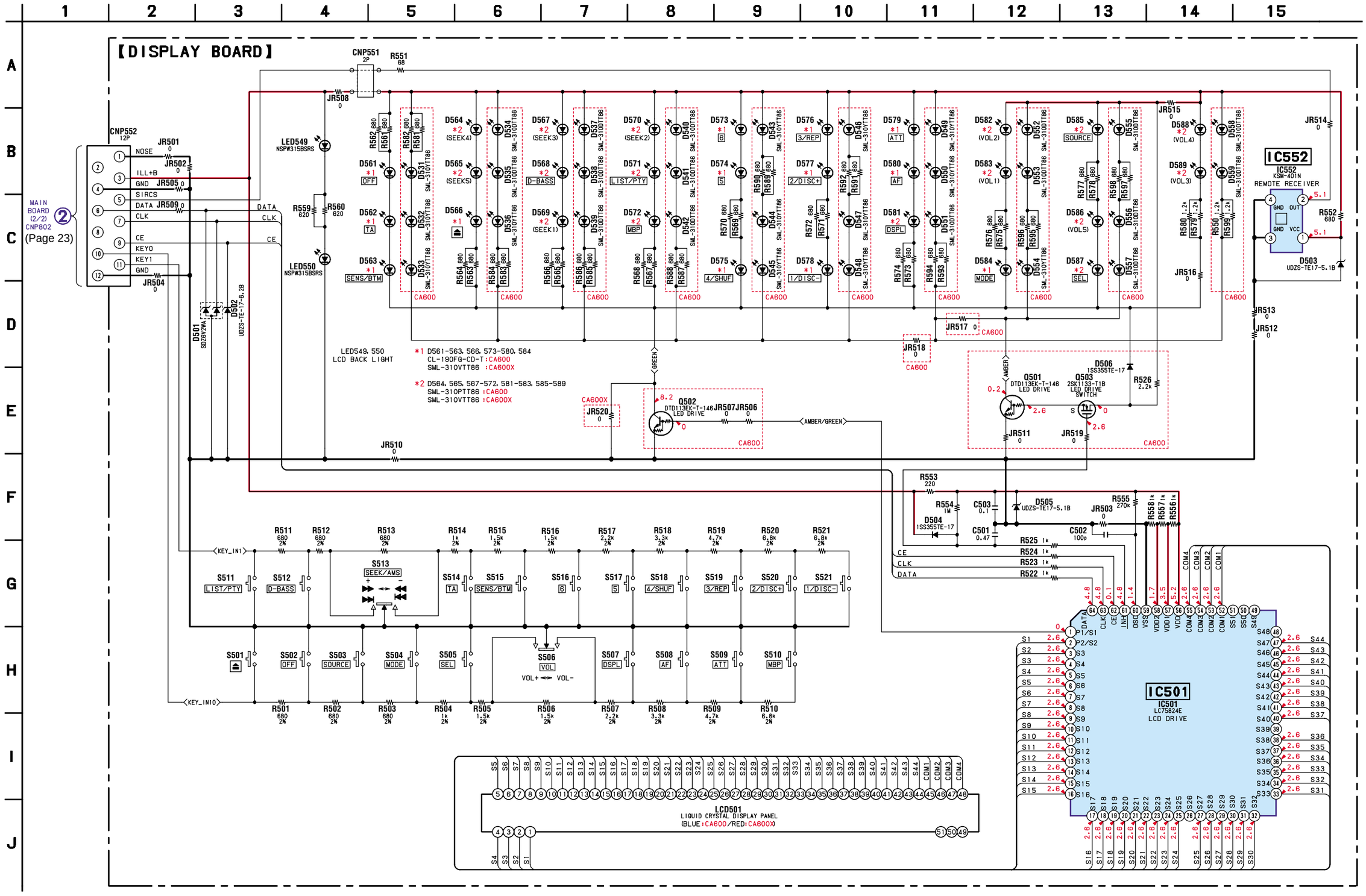
(Page 21)

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D501	G-4	(D536)	D-1	(D547)	B-9	(D558)	B-13	D570	C-2	D581	C-12	IC552	B-12
D502	G-5	(D537)	C-1	(D548)	B-10	(D559)	B-13	D571	C-3	D582	C-13		
D503	B-12	(D538)	C-2	(D549)	B-11	D561	A-2	D572	C-3	D583	C-13	LED549	G-4
D504	G-4	(D539)	C-2	(D550)	B-11	D562	B-2	D573	B-5	D584	D-13	LED550	G-11
D505	G-4	(D540)	B-2	(D551)	C-11	D563	B-4	D574	B-6	D585	C-13		
(D506)	D-13	(D541)	C-3	(D552)	C-13	D564	C-1	D575	B-7	D586	C-12	(Q501)	D-12
(D531)	B-2	(D542)	C-3	(D553)	C-13	D565	C-2	D576	B-8	D587	C-11	(Q502)	D-2
(D532)	B-3	(D543)	B-5	(D554)	D-13	D566	D-2	D577	B-9	D588	C-12	(Q503)	D-12
(D533)	B-4	(D544)	B-6	(D555)	C-13	D567	B-2	D578	B-10	D589	B-13		
(D534)	C-1	(D545)	B-7	(D556)	D-12	D568	C-2	D579	B-11				
(D535)	C-1	(D546)	B-8	(D557)	C-12	D569	C-2	D580	B-12	IC501	H-7		

( ) : CDX-CA600 only

3-12. SCHEMATIC DIAGRAM — DISPLAY SECTION —

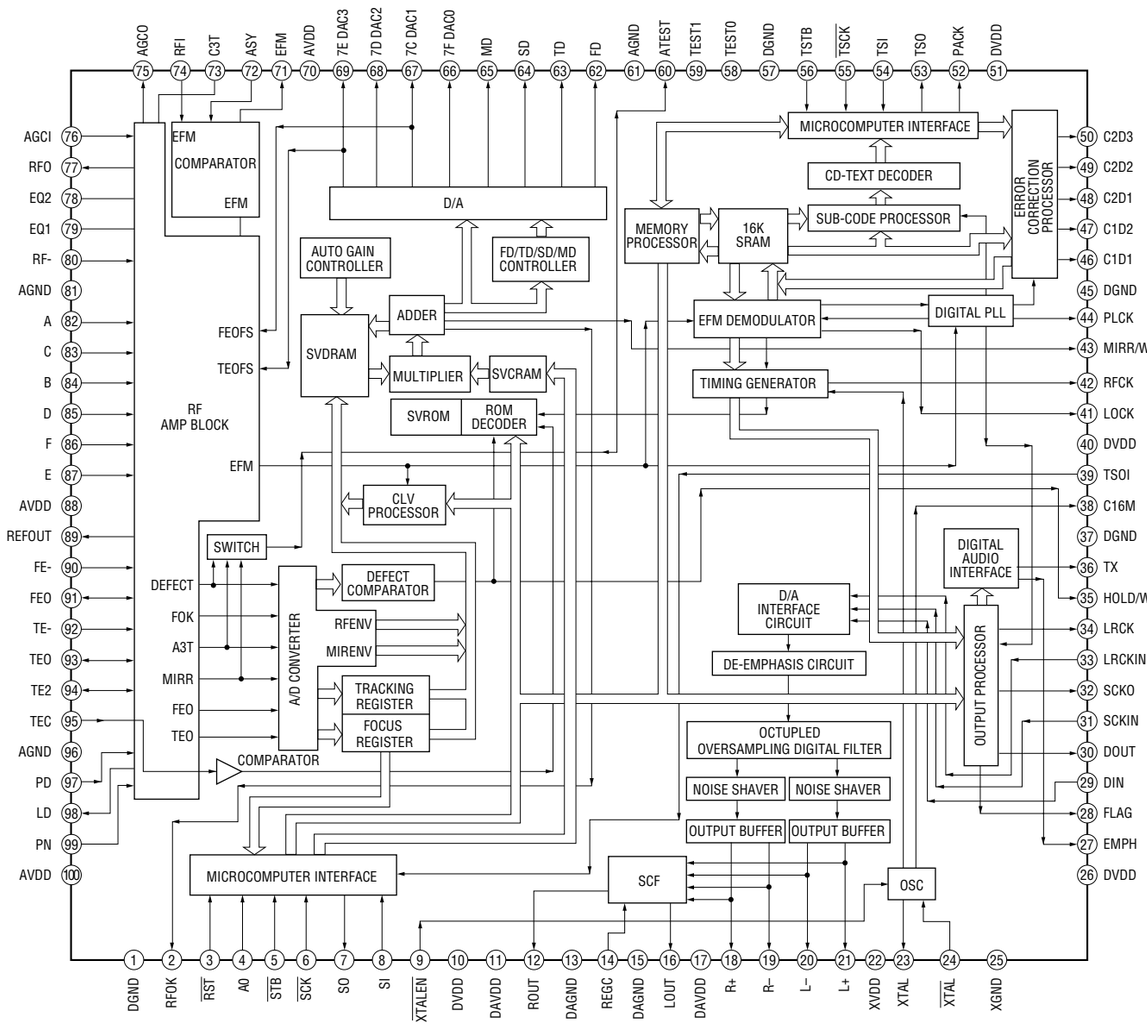


Note:

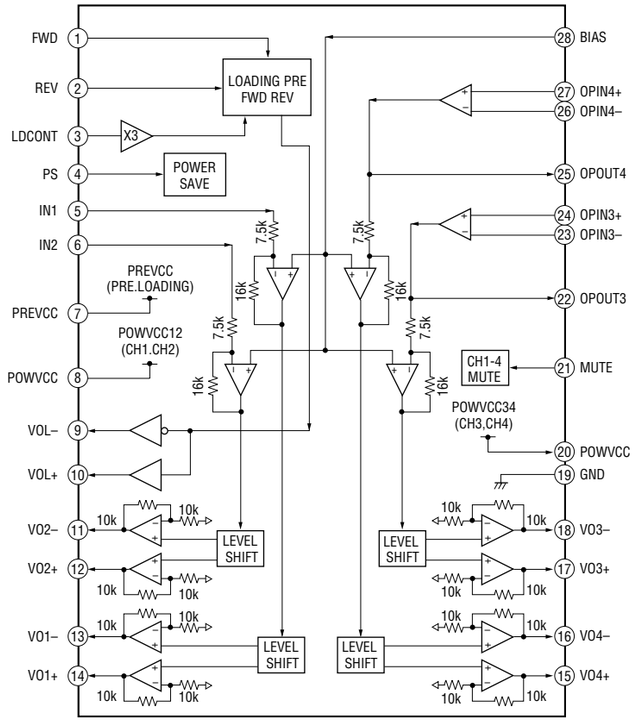
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM

• IC BLOCK DIAGRAMS

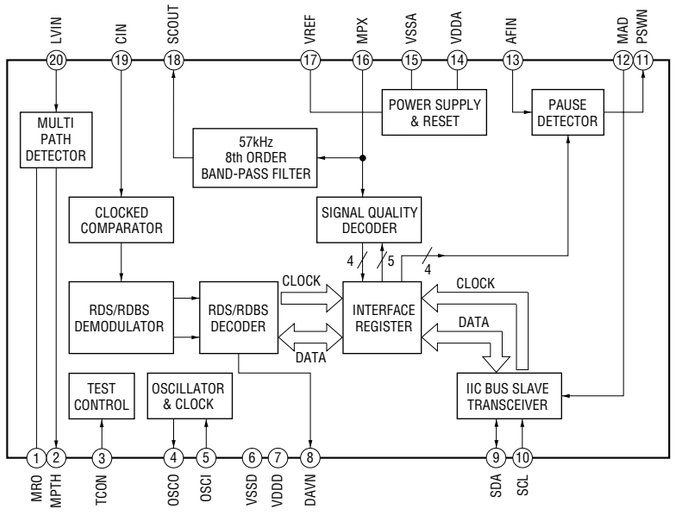
IC1 µPD63711GC-8EU



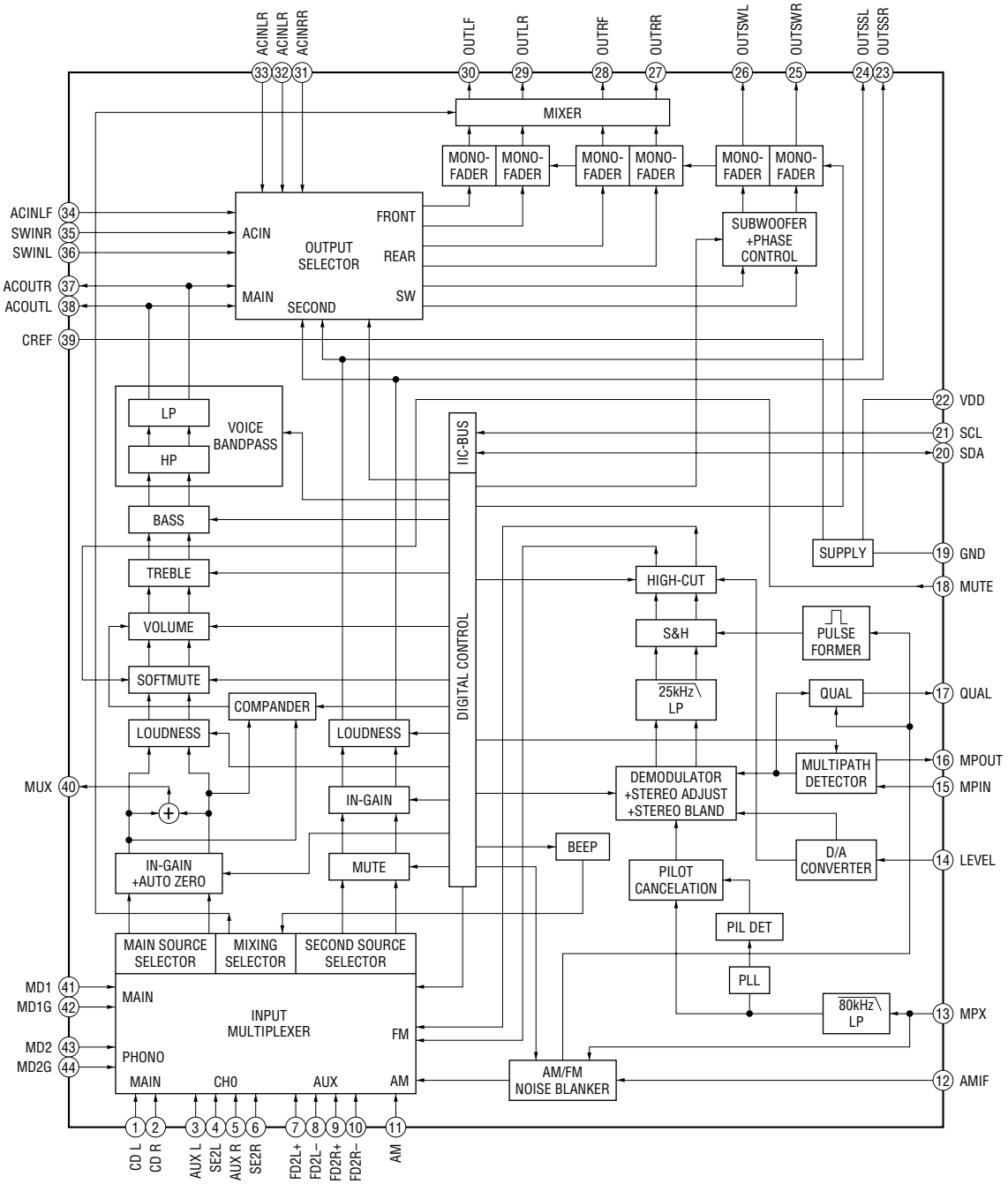
IC2 BA5810FP-E2



IC601 SAA6588T-118



IC402 TDA7402TR



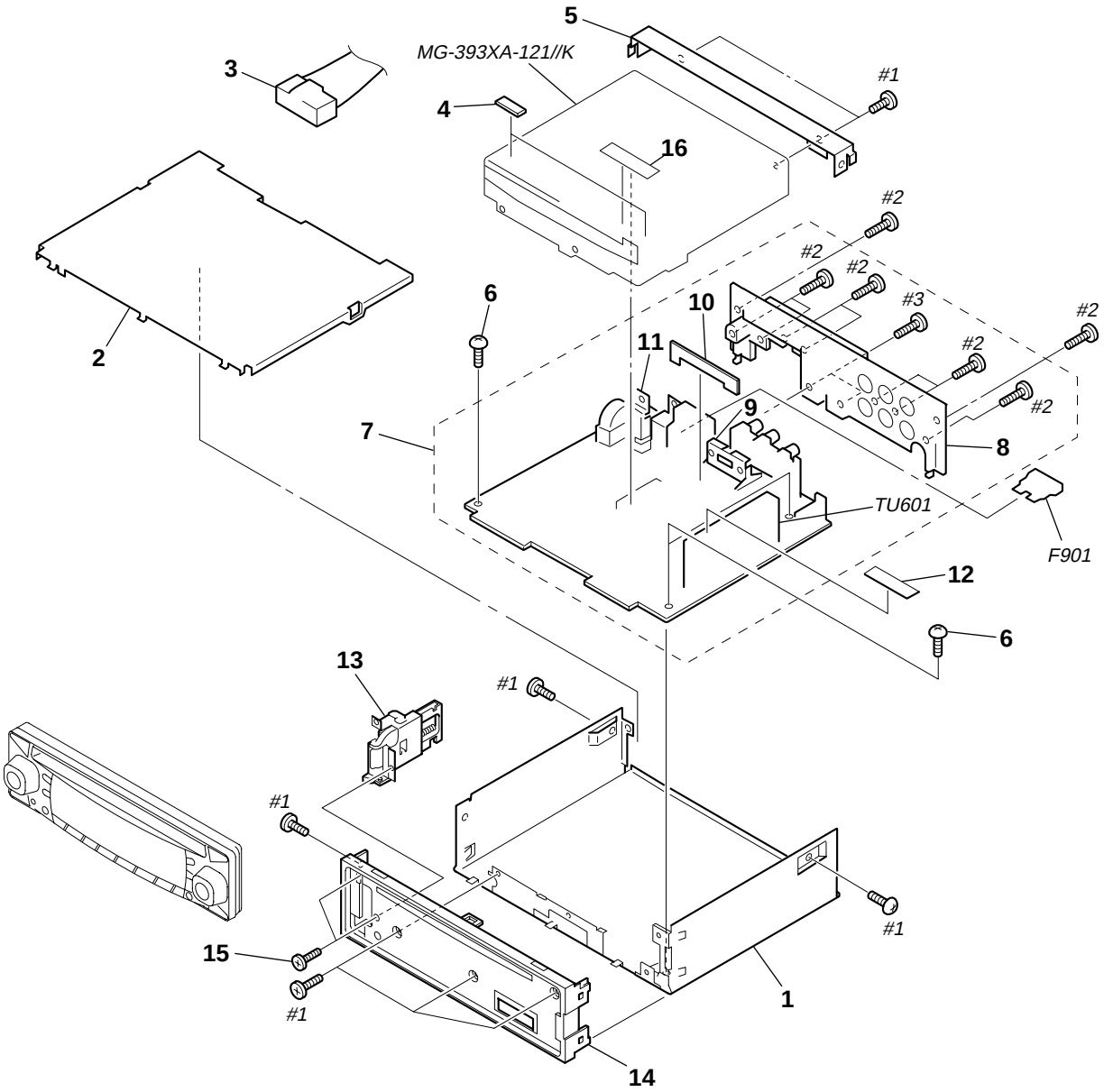
SECTION 4
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of this parts list.

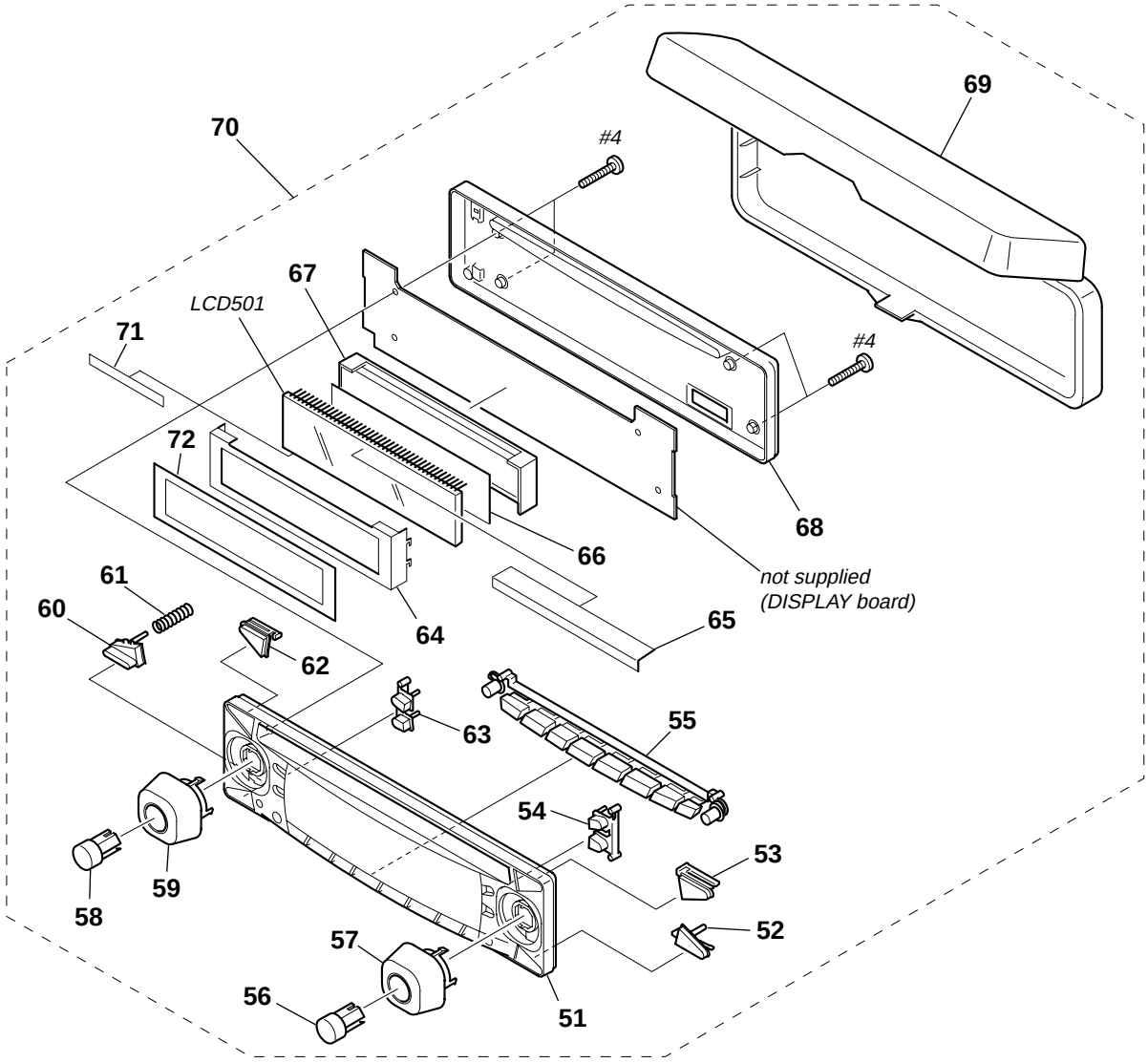
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

4-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 1	3-224-612-01	CHASSIS (CD)	
2	3-224-309-21	COVER	
3	1-776-207-82	CORD (WITH CONNECTOR) (POWER) (E)	
3	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK)
* 4	3-024-285-01	CUSHION (RUBBER)	
* 5	3-041-173-11	BRACKET (CD)	
6	3-922-535-11	SCREW (+BTT)	
7	A-3283-260-A	MAIN BOARD, COMPLETE (CA600)	
7	A-3283-288-A	MAIN BOARD, COMPLETE (CA600X)	
8	3-236-932-01	HEAT SINK (6 PIN)	
* 9	3-019-565-01	BRACKET (IC)	
10	1-683-930-11	SPEAKER BOARD	
11	3-041-261-11	BRACKET (TR)	
* 12	3-048-259-01	SHEET (E)	
13	X-3380-594-3	LOCK ASSY (S)	
14	X-3381-269-1	PANEL (1) ASSY, SUB	
15	3-231-472-01	SCREW (+B 2X4)	
16	3-223-913-11	LABEL (OP CAUTION)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TU601	A-3220-812-A	TUNER UNIT (TUX-020)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#3	7-685-795-09	SCREW +PTT 2.6X12 (S)	

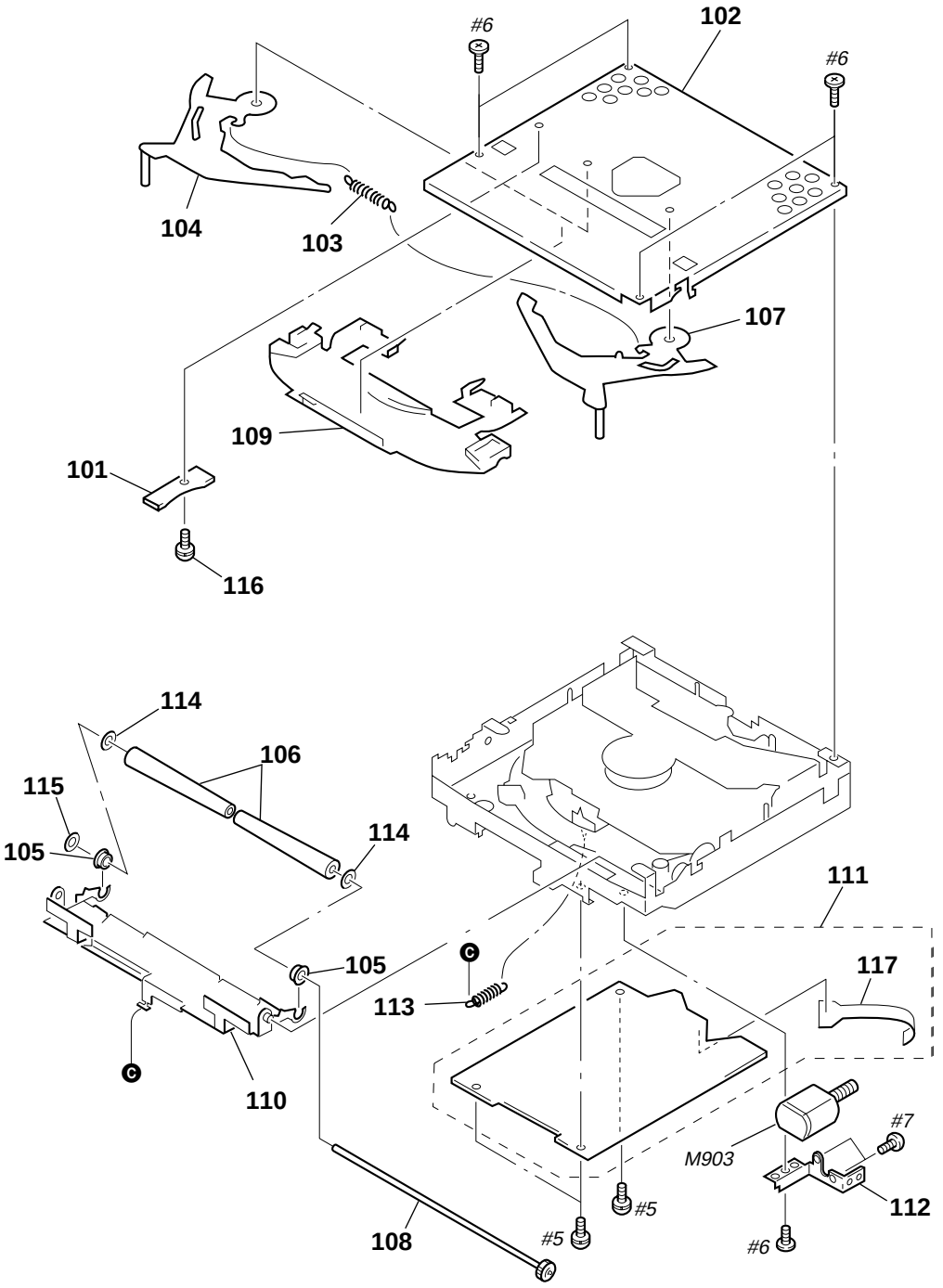
4-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-3381-643-1	PANEL (S) ASSY, FRONT (CA600)	
51	X-3381-644-1	PANEL (S) ASSY, FRONT (CA600X)	
52	3-236-909-01	BUTTON (OFF)	
53	3-236-912-01	BUTTON (EJECT)	
54	3-236-908-11	BUTTON (MBP)	
55	3-236-910-11	BUTTON (1-6)	
56	3-236-905-01	BUTTON (D-BASS)	
57	X-3381-356-1	RING (SEEK) ASSY	
58	3-236-904-01	BUTTON (SOURCE)	
59	X-3381-355-1	RING (VOL) ASSY	
60	3-236-911-01	BUTTON (RELEASE)	
61	3-229-774-01	SPRING (RELEASE)	
62	3-236-907-01	BUTTON (MODE)	
63	3-236-906-01	BUTTON (SEL)	

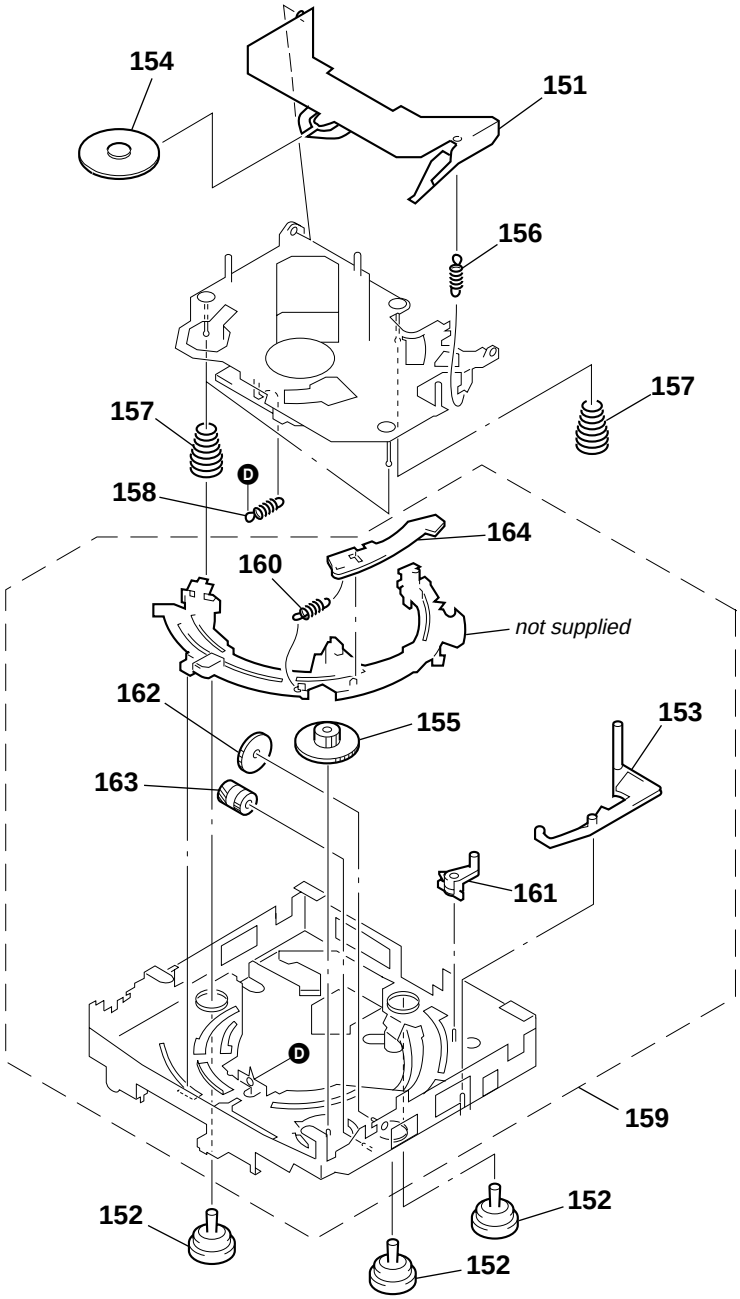
Ref. No.	Part No.	Description	Remark
64	3-236-921-01	PLATE (LCD), GROUND	
* 65	3-229-751-01	SHEET (LCD.UP)	
66	3-236-920-01	SHEET (LCD), DIFFUSION	
67	X-3381-357-1	HOLDER (LCD) ASSY	
68	3-236-902-01	PANEL, FRONT BACK	
69	X-3380-054-2	CASE ASSY (for FRONT PANEL)	
70	A-3337-076-A	PANEL COMPLETE ASSY, FRONT (CA600)	
70	A-3337-077-A	PANEL COMPLETE ASSY, FRONT (CA600X)	
* 71	3-227-293-01	SHEET (LCD)	
72	3-236-926-01	CUSHION (LCD)	
LCD501	1-804-623-11	DISPLAY PANEL, LIQUID CRYSTAL (CA600)	
LCD501	1-804-623-21	DISPLAY PANEL, LIQUID CRYSTAL (CA600X)	
#4	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

4-3. CD MECHANISM SECTION (1)
(MG-393XA-121//K)



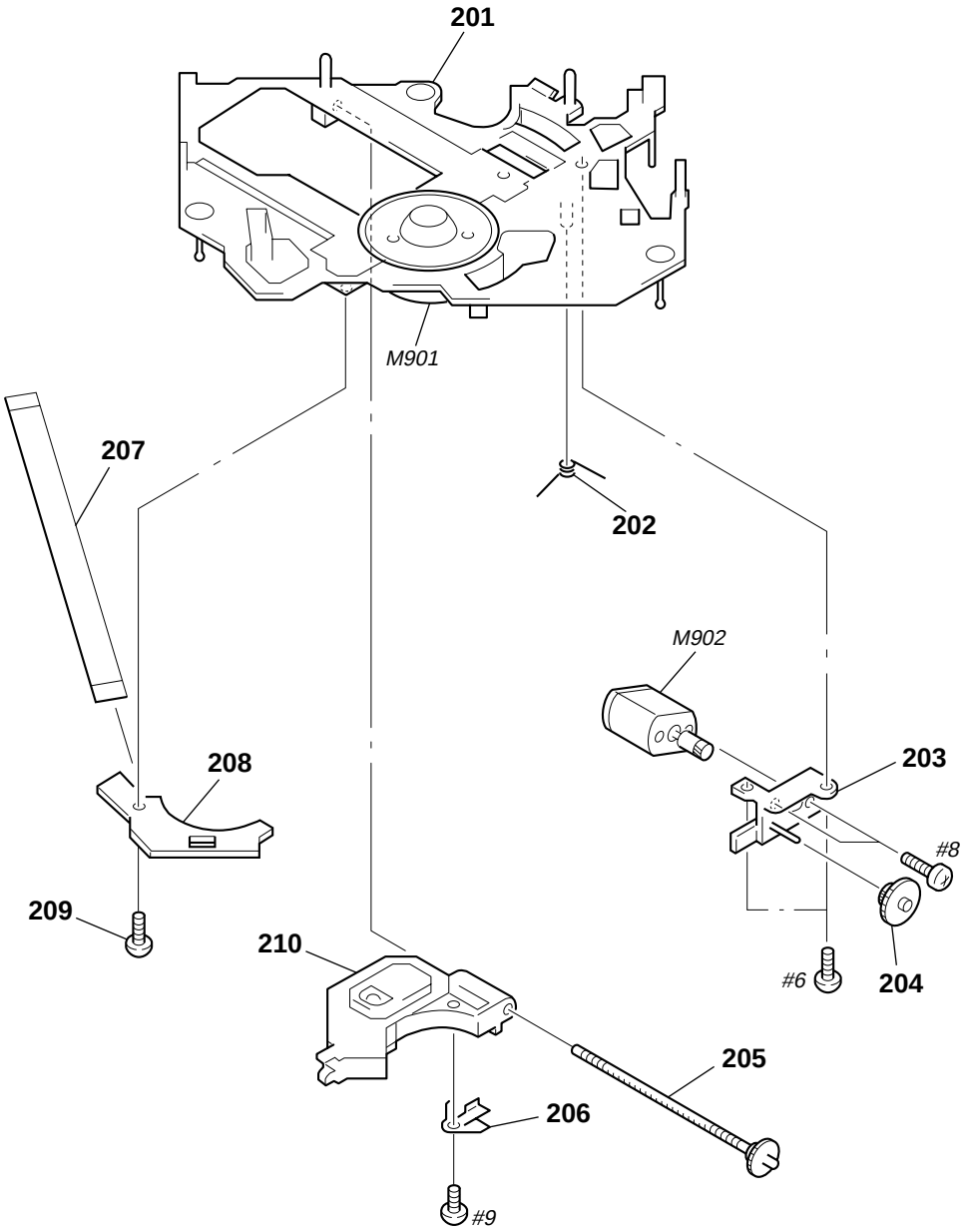
Ref. No.	Part No.	Description	Remark
101	1-683-283-11	IN SELF SW BOARD	
102	3-040-039-02	CHASSIS (T)	
103	3-040-038-01	SPRING (LR), TENSION	
104	3-040-050-01	LEVER (L)	
105	3-040-022-01	RETAINER (ROLLER), SHAFT	
106	3-040-044-01	ROLLER (S)	
107	3-040-067-01	LEVER (R)	
108	A-3301-980-A	SHAFT ROLLER ASSY	
109	3-040-037-01	GUIDE (DISC)	
110	3-040-040-02	ARM (ROLLER)	
111	A-3283-233-A	SERVO BOARD, COMPLETE	
112	3-221-779-01	BRACKET (MOTOR)	
113	3-040-034-01	SPRING (RA), TENSION	
114	3-040-042-01	WASHER	
115	3-043-880-01	RING (RA), RETAINING	
116	3-044-206-11	SCREW, SPECIAL	
117	1-683-284-11	FLEXIBLE BOARD	
M903	A-3315-039-A	MOTOR SUB ASSY, LO (LOADING)	
#5	7-628-253-00	SCREW, SPECIAL	
#6	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE3	
#7	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE3	

4-4. CD MECHANISM SECTION (2)
(MG-393XA-121//K)



Ref. No.	Part No.	Description	Remark
151	3-040-025-01	ARM, CHUCKING	
152	3-040-031-01	DAMPER (T)	
153	3-040-056-01	LEVER (D)	
154	3-040-024-01	RETAINER (DISC)	
155	3-040-054-01	WHEEL (LW), WORM	
156	3-040-026-01	SPRING (CH), TENSION	
157	3-040-032-01	SPRING (FL), COMPRESSION	
158	3-040-033-01	SPRING (KF1), TENSION	
159	A-3307-422-A	CHASSIS (M) COMPLETE ASSY	
160	3-040-059-01	SPRING (TR), TENSION	
161	3-040-057-01	LEVER (LOCK)	
162	3-040-058-01	GEAR (MDL)	
163	3-040-052-01	WHEEL (U), WORM	
164	3-040-051-02	LEVER (TR)	

4-5. CD MECHANISM SECTION (3)
(MG-393XA-121//K)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
201	X-3378-480-1	CHASSIS (OP) ASSY (including M901)	
202	3-040-029-01	SPRING (SL), TORSION	
203	3-040-045-01	BASE (DRIVING)	
204	3-040-194-01	GEAR (MIDWAY)	
205	A-3301-983-A	SHAFT (FEED) ASSY	
206	3-040-030-01	SPRING (FEED), PLATE	
207	1-823-641-11	CABLE, FLEXIBLE FLAT (6 CORE)	
208	1-683-282-11	SL SW BOARD	
209	3-909-607-01	SCREW	
⚠210	8-820-103-11	PICK-UP, OPTICAL KSS-720A/C-RP	
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)	
#6	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE3	
#8	7-627-850-28	SCREW, PRECISION +P 1.4X3	
#9	7-685-780-01	SCREW +PTT 2X3 (S)	

SECTION 5
ELECTRICAL PARTS LIST

DISPLAY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		DISPLAY BOARD			
		**********			
*	3-227-293-01	SHEET (LCD)			
*	3-229-751-01	SHEET (LCD.UP)			
	3-236-920-01	SHEET (LCD), DIFFUSION			
	3-236-921-01	PLATE (LCD), GROUND			
		< CAPACITOR >			
C501	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C502	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C503	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
* CNP551	1-779-131-11	PIN, CONNECTOR 2P			
CNP552	1-794-312-21	PIN, CONNECTOR 12P			
		< DIODE >			
D501	8-719-068-68	DIODE SDZ6V2WA			
D502	8-719-069-56	DIODE UDZS-TE-17-6.2B			
D503	8-719-069-54	DIODE UDZS-TE-17-5.1B			
D504	8-719-988-61	DIODE 1SS355TE-17			
D505	8-719-069-54	DIODE UDZS-TE-17-5.1B			
D506	8-719-988-61	DIODE 1SS355TE-17 (CA600)			
D531	8-719-077-34	LED SML-310YTT86 (OFF) (CA600)			
D532	8-719-077-34	LED SML-310YTT86 (TA) (CA600)			
D533	8-719-077-34	LED SML-310YTT86 (SENS/BTM) (CA600)			
D534	8-719-053-08	LED SML-310DTT86 (SEEK4) (CA600)			
D535	8-719-053-08	LED SML-310DTT86 (SEEK5) (CA600)			
D536	8-719-077-34	LED SML-310YTT86 (⏏) (CA600)			
D537	8-719-053-08	LED SML-310DTT86 (SEEK3) (CA600)			
D538	8-719-053-08	LED SML-310DTT86 (D-BASS) (CA600)			
D539	8-719-053-08	LED SML-310DTT86 (SEEK1) (CA600)			
D540	8-719-053-08	LED SML-310DTT86 (SEEK2) (CA600)			
D541	8-719-053-08	LED SML-310DTT86 (LIST/PTY) (CA600)			
D542	8-719-053-08	LED SML-310DTT86 (MBP) (CA600)			
D543	8-719-077-34	LED SML-310YTT86 (6) (CA600)			
D544	8-719-077-34	LED SML-310YTT86 (5) (CA600)			
D545	8-719-077-34	LED SML-310YTT86 (4/SHUF) (CA600)			
D546	8-719-077-34	LED SML-310YTT86 (3/REP) (CA600)			
D547	8-719-077-34	LED SML-310YTT86 (2/DISC +) (CA600)			
D548	8-719-077-34	LED SML-310YTT86 (1/DISC –) (CA600)			
D549	8-719-077-34	LED SML-310YTT86 (ATT) (CA600)			
D550	8-719-077-34	LED SML-310YTT86 (AF) (CA600)			
D551	8-719-053-08	LED SML-310DTT86 (DSPL) (CA600)			

Ref. No.	Part No.	Description	Remark
D552	8-719-053-08	LED SML-310DTT86 (VOL2) (CA600)	
D553	8-719-053-08	LED SML-310DTT86 (VOL1) (CA600)	
D554	8-719-077-34	LED SML-310YTT86 (MODE) (CA600)	
D555	8-719-053-08	LED SML-310DTT86 (SOURCE) (CA600)	
D556	8-719-053-08	LED SML-310DTT86 (VOL5) (CA600)	
D557	8-719-053-08	LED SML-310DTT86 (SEL) (CA600)	
D558	8-719-053-08	LED SML-310DTT86 (VOL4) (CA600)	
D559	8-719-053-08	LED SML-310DTT86 (VOL3) (CA600)	
D561	8-719-038-05	LED CL-190FG-CD-T (OFF) (CA600)	
D561	8-719-053-09	LED SML-310VTT86 (OFF) (CA600X)	
D562	8-719-038-05	LED CL-190FG-CD-T (TA) (CA600)	
D562	8-719-053-09	LED SML-310VTT86 (TA) (CA600X)	
D563	8-719-038-05	LED CL-190FG-CD-T (SENS/BTM) (CA600)	
D563	8-719-053-09	LED SML-310VTT86 (SENS/BTM) (CA600X)	
D564	8-719-053-09	LED SML-310VTT86 (SEEK4) (CA600X)	
D564	8-719-078-21	LED SML-310PTT86 (SEEK4) (CA600)	
D565	8-719-053-09	LED SML-310VTT86 (SEEK5) (CA600X)	
D565	8-719-078-21	LED SML-310PTT86 (SEEK5) (CA600)	
D566	8-719-038-05	LED CL-190FG-CD-T (⏏) (CA600)	
D566	8-719-053-09	LED SML-310VTT86 (⏏) (CA600X)	
D567	8-719-053-09	LED SML-310VTT86 (SEEK3) (CA600X)	
D567	8-719-078-21	LED SML-310PTT86 (SEEK3) (CA600)	
D568	8-719-053-09	LED SML-310VTT86 (D-BASS) (CA600X)	
D568	8-719-078-21	LED SML-310PTT86 (D-BASS) (CA600)	
D569	8-719-053-09	LED SML-310VTT86 (SEEK1) (CA600X)	
D569	8-719-078-21	LED SML-310PTT86 (SEEK1) (CA600)	
D570	8-719-053-09	LED SML-310VTT86 (SEEK2) (CA600X)	
D570	8-719-078-21	LED SML-310PTT86 (SEEK2) (CA600)	
D571	8-719-053-09	LED SML-310VTT86 (LIST/PTY) (CA600X)	
D571	8-719-078-21	LED SML-310PTT86 (LIST/PTY) (CA600)	
D572	8-719-053-09	LED SML-310VTT86 (MBP) (CA600X)	
D572	8-719-078-21	LED SML-310PTT86 (MBP) (CA600)	
D573	8-719-038-05	LED CL-190FG-CD-T (6) (CA600)	
D573	8-719-053-09	LED SML-310VTT86 (6) (CA600X)	
D574	8-719-038-05	LED CL-190FG-CD-T (5) (CA600)	
D574	8-719-053-09	LED SML-310VTT86 (5) (CA600X)	
D575	8-719-038-05	LED CL-190FG-CD-T (4/SHUF) (CA600)	
D575	8-719-053-09	LED SML-310VTT86 (4/SHUF) (CA600X)	
D576	8-719-038-05	LED CL-190FG-CD-T (3/REP) (CA600)	
D576	8-719-053-09	LED SML-310VTT86 (3/REP) (CA600X)	
D577	8-719-038-05	LED CL-190FG-CD-T (2/DISC +) (CA600)	
D577	8-719-053-09	LED SML-310VTT86 (2/DISC +) (CA600X)	
D578	8-719-038-05	LED CL-190FG-CD-T (1/DISC –) (CA600)	
D578	8-719-053-09	LED SML-310VTT86 (1/DISC –) (CA600X)	
D579	8-719-038-05	LED CL-190FG-CD-T (ATT) (CA600)	

DISPLAY

Ref. No.	Part No.	Description	Remark
D579	8-719-053-09	LED SML-310VTT86 (ATT) (CA600X)	
D580	8-719-038-05	LED CL-190FG-CD-T (AF) (CA600)	
D580	8-719-053-09	LED SML-310VTT86 (AF) (CA600X)	
D581	8-719-053-09	LED SML-310VTT86 (DSPL) (CA600X)	
D581	8-719-078-21	LED SML-310PTT86 (DSPL) (CA600)	
D582	8-719-053-09	LED SML-310VTT86 (VOL2) (CA600X)	
D582	8-719-078-21	LED SML-310PTT86 (VOL2) (CA600)	
D583	8-719-053-09	LED SML-310VTT86 (VOL1) (CA600X)	
D583	8-719-078-21	LED SML-310PTT86 (VOL1) (CA600)	
D584	8-719-038-05	LED CL-190FG-CD-T (MODE) (CA600)	
D584	8-719-053-09	LED SML-310VTT86 (MODE) (CA600X)	
D585	8-719-053-09	LED SML-310VTT86 (SOURCE) (CA600X)	
D585	8-719-078-21	LED SML-310PTT86 (SOURCE) (CA600)	
D586	8-719-053-09	LED SML-310VTT86 (VOL5) (CA600X)	
D586	8-719-078-21	LED SML-310PTT86 (VOL5) (CA600)	
D587	8-719-053-09	LED SML-310VTT86 (SEL) (CA600X)	
D587	8-719-078-21	LED SML-310PTT86 (SEL) (CA600)	
D588	8-719-053-09	LED SML-310VTT86 (VOL4) (CA600X)	
D588	8-719-078-21	LED SML-310PTT86 (VOL4) (CA600)	
D589	8-719-053-09	LED SML-310VTT86 (VOL3) (CA600X)	
D589	8-719-078-21	LED SML-310PTT86 (VOL3) (CA600)	
		< IC >	
IC501	8-759-366-34	IC LC75824E	
IC552	8-749-017-35	IC KSM-401N	
		< JUMPER RESISTOR >	
JR501	1-216-864-11	METAL CHIP 0 5%	1/16W
JR502	1-216-864-11	METAL CHIP 0 5%	1/16W
JR503	1-216-864-11	METAL CHIP 0 5%	1/16W
JR504	1-216-864-11	METAL CHIP 0 5%	1/16W
JR505	1-216-864-11	METAL CHIP 0 5%	1/16W
JR506	1-216-295-11	SHORT 0	(CA600)
JR507	1-216-864-11	METAL CHIP 0 5%	1/16W (CA600)
JR508	1-216-864-11	METAL CHIP 0 5%	1/16W
JR509	1-216-864-11	METAL CHIP 0 5%	1/16W
JR510	1-216-864-11	METAL CHIP 0 5%	1/16W
JR511	1-216-864-11	METAL CHIP 0 5%	1/16W (CA600)
JR512	1-216-295-11	SHORT 0	
JR513	1-216-864-11	METAL CHIP 0 5%	1/16W
JR514	1-216-295-11	SHORT 0	
JR515	1-216-864-11	METAL CHIP 0 5%	1/16W
JR516	1-216-295-11	SHORT 0	
JR517	1-216-864-11	METAL CHIP 0 5%	1/16W (CA600)
JR518	1-216-295-11	SHORT 0	(CA600)
JR519	1-216-864-11	METAL CHIP 0 5%	1/16W (CA600)
JR520	1-216-864-11	METAL CHIP 0 5%	1/16W (CA600X)

Ref. No.	Part No.	Description	Remark
		< LIQUID CRYSTAL DISPLAY >	
LCD501	1-804-623-11	DISPLAY PANEL, LIQUID CRYSTAL (CA600)	
LCD501	1-804-623-21	DISPLAY PANEL, LIQUID CRYSTAL (CA600X)	
		< DIODE >	
LED549	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)	
LED550	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)	
		< TRANSISTOR >	
Q501	8-729-904-66	TRANSISTOR DTD113EK-T-146 (CA600)	
Q502	8-729-904-66	TRANSISTOR DTD113EK-T-146 (CA600)	
Q503	8-729-144-85	FET 2SK1133 (CA600)	
		< RESISTOR >	
R501	1-219-286-11	RES-CHIP 680 2%	1/16W
R502	1-219-286-11	RES-CHIP 680 2%	1/16W
R503	1-219-286-11	RES-CHIP 680 2%	1/16W
R504	1-218-847-11	RES-CHIP 1K 2%	1/16W
R505	1-218-851-11	RES-CHIP 1.5K 2%	1/16W
R506	1-218-851-11	RES-CHIP 1.5K 2%	1/16W
R507	1-218-855-11	RES-CHIP 2.2K 2%	1/16W
R508	1-218-859-11	RES-CHIP 3.3K 2%	1/16W
R509	1-218-863-11	RES-CHIP 4.7K 2%	1/16W
R510	1-218-867-11	RES-CHIP 6.8K 2%	1/16W
R511	1-219-286-11	RES-CHIP 680 2%	1/16W
R512	1-219-286-11	RES-CHIP 680 2%	1/16W
R513	1-219-286-11	RES-CHIP 680 2%	1/16W
R514	1-218-847-11	RES-CHIP 1K 2%	1/16W
R515	1-218-851-11	RES-CHIP 1.5K 2%	1/16W
R516	1-218-851-11	RES-CHIP 1.5K 2%	1/16W
R517	1-218-855-11	RES-CHIP 2.2K 2%	1/16W
R518	1-218-859-11	RES-CHIP 3.3K 2%	1/16W
R519	1-218-863-11	RES-CHIP 4.7K 2%	1/16W
R520	1-218-867-11	RES-CHIP 6.8K 2%	1/16W
R521	1-218-867-11	RES-CHIP 6.8K 2%	1/16W
R522	1-216-821-11	METAL CHIP 1K 5%	1/16W
R523	1-216-821-11	METAL CHIP 1K 5%	1/16W
R524	1-216-821-11	METAL CHIP 1K 5%	1/16W
R525	1-216-821-11	METAL CHIP 1K 5%	1/16W
R526	1-216-825-11	METAL CHIP 2.2K 5%	1/16W (CA600)
R550	1-216-822-11	METAL CHIP 1.2K 5%	1/16W (CA600)
R551	1-216-807-11	METAL CHIP 68 5%	1/16W
R552	1-216-819-11	METAL CHIP 680 5%	1/16W
R553	1-216-813-11	METAL CHIP 220 5%	1/16W
R554	1-216-857-11	METAL CHIP 1M 5%	1/16W
R555	1-216-850-11	METAL CHIP 270K 5%	1/16W
R556	1-216-821-11	METAL CHIP 1K 5%	1/16W
R557	1-216-821-11	METAL CHIP 1K 5%	1/16W
R558	1-216-821-11	METAL CHIP 1K 5%	1/16W
R559	1-220-373-11	RES-CHIP 620 5%	1/16W

Ref. No.	Part No.	Description			Remark
R560	1-220-373-11	RES-CHIP	620	5%	1/16W
R561	1-216-819-11	METAL CHIP	680	5%	1/16W
R562	1-216-819-11	METAL CHIP	680	5%	1/16W
R563	1-216-819-11	METAL CHIP	680	5%	1/16W
R564	1-216-819-11	METAL CHIP	680	5%	1/16W
R565	1-216-819-11	METAL CHIP	680	5%	1/16W
R566	1-216-819-11	METAL CHIP	680	5%	1/16W
R567	1-216-819-11	METAL CHIP	680	5%	1/16W
R568	1-216-819-11	METAL CHIP	680	5%	1/16W
R569	1-216-819-11	METAL CHIP	680	5%	1/16W
R570	1-216-819-11	METAL CHIP	680	5%	1/16W
R571	1-216-819-11	METAL CHIP	680	5%	1/16W
R572	1-216-819-11	METAL CHIP	680	5%	1/16W
R573	1-216-819-11	METAL CHIP	680	5%	1/16W
R574	1-216-819-11	METAL CHIP	680	5%	1/16W
R575	1-216-819-11	METAL CHIP	680	5%	1/16W
R576	1-216-819-11	METAL CHIP	680	5%	1/16W
R577	1-216-819-11	METAL CHIP	680	5%	1/16W
R578	1-216-819-11	METAL CHIP	680	5%	1/16W
R579	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R580	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R581	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R582	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R583	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R584	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R585	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R586	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R587	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R588	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R589	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R590	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R591	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R592	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R593	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R594	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R595	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R596	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R597	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R598	1-216-819-11	METAL CHIP	680	5%	1/16W (CA600)
R599	1-216-822-11	METAL CHIP	1.2K	5%	1/16W (CA600)

< SWITCH >

S501	1-572-704-31	SWITCH, KEYBOARD (⏏)
S502	1-572-704-31	SWITCH, KEYBOARD (OFF)
S503	1-572-704-31	SWITCH, KEYBOARD (SOURCE)
S504	1-572-704-31	SWITCH, KEYBOARD (MODE)
S505	1-572-704-31	SWITCH, KEYBOARD (SEL)
S506	1-771-290-11	SWITCH, SLIDE (VOL)
S507	1-572-704-31	SWITCH, KEYBOARD (DSPL)
S508	1-572-704-31	SWITCH, KEYBOARD (AF)
S509	1-572-704-31	SWITCH, KEYBOARD (ATT)
S510	1-572-704-31	SWITCH, KEYBOARD (MBP)
S511	1-572-704-31	SWITCH, KEYBOARD (LIST/PTY)
S512	1-572-704-31	SWITCH, KEYBOARD (D-BASS)
S513	1-771-290-11	SWITCH, SLIDE (SEEK/AMS)
S514	1-572-704-31	SWITCH, KEYBOARD (TA)
S515	1-572-704-31	SWITCH, KEYBOARD (SENS/BTM)
S516	1-572-704-31	SWITCH, KEYBOARD (6)
S517	1-572-704-31	SWITCH, KEYBOARD (5)
S518	1-572-704-31	SWITCH, KEYBOARD (4/SHUF)
S519	1-572-704-31	SWITCH, KEYBOARD (3/REP)
S520	1-572-704-31	SWITCH, KEYBOARD (2/DISC +)
S521	1-572-704-31	SWITCH, KEYBOARD (1/DISC –)

****

1-683-283-11 IN SELF SW BOARD

****

< SWITCH >

SW2	1-529-566-31	SWITCH, PUSH (1 KEY) (SELF)
SW3	1-529-566-31	SWITCH, PUSH (1 KEY) (DISC IN)

****

A-3283-260-A MAIN BOARD, COMPLETE (including SPEAKER BOARD) (CA600)

A-3283-288-A MAIN BOARD, COMPLETE (including SPEAKER BOARD) (CA600X)

****

*	3-019-565-01	BRACKET (IC)
	3-041-261-11	BRACKET (TR)
	3-236-932-01	HEAT SINK (6 PIN)
	7-685-793-09	SCREW +PTT 2.6X8 (S)
	7-685-795-09	SCREW +PTT 2.6X12 (S)

< CAPACITOR >

C401	1-124-233-11	ELECT	10uF	20%	16V
C402	1-124-233-11	ELECT	10uF	20%	16V
C403	1-124-233-11	ELECT	10uF	20%	16V
C404	1-124-233-11	ELECT	10uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C405	1-115-156-11	CERAMIC CHIP	1uF		10V
C406	1-115-156-11	CERAMIC CHIP	1uF		10V
C407	1-115-156-11	CERAMIC CHIP	1uF		10V
C408	1-115-156-11	CERAMIC CHIP	1uF		10V
C409	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C411	1-124-242-00	ELECT	33uF	20%	25V
C412	1-124-233-11	ELECT	10uF	20%	16V
C416	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C417	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C418	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C419	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C420	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C421	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C601	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C602	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C604	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C607	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C608	1-124-584-00	ELECT	100uF	20%	10V
C609	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C610	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C611	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C612	1-125-837-00	CERAMIC CHIP	1uF	10%	6.3V
C613	1-125-837-00	CERAMIC CHIP	1uF	10%	6.3V
C614	1-124-589-11	ELECT	47uF	20%	16V
C615	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C616	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C617	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C618	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C619	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C620	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C621	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C622	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C623	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C624	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C625	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C626	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C627	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C628	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C630	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C631	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C632	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C633	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C634	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C701	1-124-584-00	ELECT	100uF	20%	10V
C702	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C703	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C704	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C705	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C706	1-124-233-11	ELECT	10uF	20%	16V
C707	1-125-837-00	CERAMIC CHIP	1uF	10%	6.3V
C708	1-125-837-00	CERAMIC CHIP	1uF	10%	6.3V
C709	1-125-837-00	CERAMIC CHIP	1uF	10%	6.3V
C710	1-125-837-00	CERAMIC CHIP	1uF	10%	6.3V
C712	1-124-584-00	ELECT	100uF	20%	10V
C801	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C802	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C803	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C804	1-124-119-00	ELECT	330uF	20%	16V
C806	1-128-647-11	DOUBLE LAYERS	0.1F		5.5V
C807	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C808	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C809	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C810	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C811	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C812	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C814	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C815	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C816	1-124-635-00	ELECT	220uF	20%	6.3V
C901	1-135-473-21	ELECT	3300uF	20%	16V
C902	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C905	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C906	1-216-864-11	METAL CHIP	0	5%	1/16W
C907	1-125-972-61	ELECT	100uF	20%	16V
C909	1-126-160-11	ELECT	1uF	20%	50V
C912	1-128-057-11	ELECT	330uF	20%	6.3V
C917	1-124-584-00	ELECT	100uF	20%	10V
C918	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C920	1-124-584-00	ELECT	100uF	20%	10V

< CONNECTOR >

CNJ801	1-580-907-31	PLUG, CONNECTOR 2P (BUS CONTROL IN)
CNP701	1-815-260-11	CONNECTOR, BOARD TO BOARD 30P
CNP802	1-794-311-21	PLUG, CONNECTOR 12P
CNP901	1-774-701-11	PIN, CONNECTOR 16P

< JACK >

CNP801	1-764-270-21	JACK, STEREO MINIATURE (DIA.3.5) (REMOTE IN)

< DIODE >

D601	8-719-987-69	DIODE DAN217
D602	8-719-069-54	DIODE UDZS-TE-17-5.1B
D801	8-719-110-49	DIODE RD18ES-B2
D802	8-719-069-56	DIODE UDZS-TE-17-6.2B
D804	8-719-058-24	DIODE RB501V-40TE-17
D805	8-719-056-93	DIODE UDZ-TE-17-18B
D806	8-719-056-93	DIODE UDZ-TE-17-18B
D807	8-719-991-33	DIODE 1SS133T-77
D809	8-719-988-61	DIODE 1SS355TE-17
D811	8-719-109-97	DIODE RD6.8ES-B2
D812	8-719-109-97	DIODE RD6.8ES-B2
D813	8-719-109-97	DIODE RD6.8ES-B2
D814	8-719-109-97	DIODE RD6.8ES-B2
D815	8-719-109-97	DIODE RD6.8ES-B2
D816	8-719-109-97	DIODE RD6.8ES-B2
D817	8-719-109-97	DIODE RD6.8ES-B2

Ref. No.	Part No.	Description	Remark
D901	8-719-200-82	DIODE 11ES2	
D902	8-719-200-82	DIODE 11ES2	
D903	8-719-200-82	DIODE 11ES2	
D904	8-719-200-82	DIODE 11ES2	
D905	8-719-200-82	DIODE 11ES2	
D906	8-719-053-18	DIODE 1SR154-400TE-25	
D907	8-719-053-18	DIODE 1SR154-400TE-25	
D908	8-719-200-82	DIODE 11ES2	
D909	8-719-049-38	DIODE 1N5404TU	
D910	8-719-200-82	DIODE 11ES2	
D911	8-719-200-82	DIODE 11ES2	
D912	8-719-978-33	DIODE DTZ-TT11-6.8B	
D914	8-719-110-49	DIODE RD18ES-B2	
D916	8-719-109-89	DIODE RD5.6ES-B2	
D917	8-719-110-14	DIODE RD9.1ES-B3	
D918	8-719-988-61	DIODE 1SS355TE-17	
D919	8-719-109-89	DIODE RD5.6ES-B2	
D921	8-719-988-61	DIODE 1SS355TE-17	
D922	8-719-422-16	DIODE MA8039-L-TX	
D925	8-719-978-33	DIODE DTZ-TT11-6.8B	
D926	8-719-921-63	DIODE MTZJ-7.5B	
D927	8-719-109-89	DIODE RD5.6ES-B2	
		< FERRITE BEAD >	
FB801	1-414-235-22	INDUCTOR, FERRITE BEAD	
		< IC >	
IC401	8-759-827-14	IC TA8268AH	
IC402	8-759-653-27	IC TDA7402TR	
IC601	8-759-492-59	IC SAA6588T-118	
IC602	8-759-909-71	IC BA4558F	
IC801	6-801-174-01	IC MN101C49KCF	
IC802	6-701-405-01	IC PST3443UL	
IC803	8-759-096-16	IC MM1175XFF	
		< JUMPER RESISTOR >	
D819	1-216-295-11	SHORT 0	
D820	1-216-295-11	SHORT 0	
JR701	1-216-864-11	METAL CHIP 0 5% 1/16W	
JR703	1-216-864-11	METAL CHIP 0 5% 1/16W	
JR803	1-216-295-11	SHORT 0	
JR804	1-216-864-11	METAL CHIP 0 5% 1/16W	
JR901	1-216-864-11	METAL CHIP 0 5% 1/16W	
JR903	1-216-864-11	METAL CHIP 0 5% 1/16W	
		< COIL >	
L900	1-419-476-31	COIL, CHOKE 250uH	
		< JACK >	
PJ401	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN, AUDIO OUT FRONT/REAR)	
PJ601	1-793-598-11	JACK (ANTENNA)	

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q401	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q402	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q403	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q404	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q601	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q602	8-729-055-96	TRANSISTOR SRC1203SF	
Q801	8-729-055-96	TRANSISTOR SRC1203SF	
Q803	8-729-055-92	TRANSISTOR SRA2203SF	
Q901	8-729-049-40	TRANSISTOR 2SC5343SFG	
Q902	8-729-049-40	TRANSISTOR 2SC5343SFG	
Q903	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q904	8-729-055-92	TRANSISTOR SRA2203SF	
Q905	8-729-055-96	TRANSISTOR SRC1203SF	
Q906	8-729-019-00	TRANSISTOR 2SD2394-G	
Q907	8-729-055-92	TRANSISTOR SRA2203SF	
Q908	8-729-055-96	TRANSISTOR SRC1203SF	
Q909	8-729-049-43	TRANSISTOR STB1132Y	
Q910	8-729-055-96	TRANSISTOR SRC1203SF	
Q911	8-729-049-40	TRANSISTOR 2SC5343SFG	
Q912	8-729-019-00	TRANSISTOR 2SD2394-G	
Q913	8-729-055-92	TRANSISTOR SRA2203SF	
Q914	8-729-055-96	TRANSISTOR SRC1203SF	
Q915	8-729-055-96	TRANSISTOR SRC1203SF	
Q916	8-729-920-85	TRANSISTOR 2SD1664-QR	
Q917	8-729-055-96	TRANSISTOR SRC1203SF	
Q918	8-729-049-43	TRANSISTOR STB1132Y	
Q919	8-729-055-96	TRANSISTOR SRC1203SF	
Q920	8-729-820-46	TRANSISTOR 2SB1202FAS	
Q921	8-729-055-96	TRANSISTOR SRC1203SF	
Q922	8-729-049-43	TRANSISTOR STB1132Y	
		< RESISTOR >	
R401	1-216-813-11	METAL CHIP 220 5% 1/16W	
R402	1-216-813-11	METAL CHIP 220 5% 1/16W	
R403	1-216-813-11	METAL CHIP 220 5% 1/16W	
R404	1-216-813-11	METAL CHIP 220 5% 1/16W	
R406	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R407	1-216-864-11	METAL CHIP 0 5% 1/16W	
R408	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R409	1-216-864-11	METAL CHIP 0 5% 1/16W	
R410	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R412	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R413	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R414	1-216-833-11	METAL CHIP 10K 5% 1/16W	
R415	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R416	1-216-833-11	METAL CHIP 10K 5% 1/16W	
R417	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R418	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R419	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R420	1-216-833-11	METAL CHIP 10K 5% 1/16W	
R601	1-216-864-11	METAL CHIP 0 5% 1/16W	
R602	1-216-809-11	METAL CHIP 100 5% 1/16W	

MAIN

Ref. No.	Part No.	Description			Remark
R603	1-216-809-11	METAL CHIP	100	5%	1/16W
R604	1-218-867-11	RES-CHIP	6.8K	5%	1/16W
R605	1-216-845-11	METAL CHIP	100K	5%	1/16W
R606	1-216-841-11	METAL CHIP	47K	5%	1/16W
R607	1-216-817-11	METAL CHIP	470	5%	1/16W
R608	1-216-797-11	METAL CHIP	10	5%	1/16W
R609	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R610	1-216-821-11	METAL CHIP	1K	5%	1/16W
R611	1-216-853-11	METAL CHIP	470K	5%	1/16W
R612	1-216-797-11	METAL CHIP	10	5%	1/16W
R613	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R614	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R615	1-216-833-11	METAL CHIP	10K	5%	1/16W
R616	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R617	1-216-833-11	METAL CHIP	10K	5%	1/16W
R618	1-216-809-11	METAL CHIP	100	5%	1/16W
R619	1-216-845-11	METAL CHIP	100K	5%	1/16W
R620	1-216-809-11	METAL CHIP	100	5%	1/16W
R621	1-216-857-11	METAL CHIP	1M	5%	1/16W
R623	1-216-833-11	METAL CHIP	10K	5%	1/16W
R701	1-216-841-11	METAL CHIP	47K	5%	1/16W
R703	1-216-864-11	METAL CHIP	0	5%	1/16W
R704	1-216-864-11	METAL CHIP	0	5%	1/16W
R705	1-216-864-11	METAL CHIP	0	5%	1/16W
R801	1-216-821-11	METAL CHIP	1K	5%	1/16W
R802	1-216-835-11	METAL CHIP	15K	5%	1/16W
R804	1-247-807-31	CARBON	100	5%	1/4W
R805	1-216-809-11	METAL CHIP	100	5%	1/16W
R806	1-216-809-11	METAL CHIP	100	5%	1/16W
R807	1-216-809-11	METAL CHIP	100	5%	1/16W
R808	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R809	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R810	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R811	1-216-845-11	METAL CHIP	100K	5%	1/16W
R812	1-216-841-11	METAL CHIP	47K	5%	1/16W
R813	1-216-809-11	METAL CHIP	100	5%	1/16W
R814	1-216-809-11	METAL CHIP	100	5%	1/16W
R815	1-216-809-11	METAL CHIP	100	5%	1/16W
R816	1-216-813-11	METAL CHIP	220	5%	1/16W
R817	1-216-809-11	METAL CHIP	100	5%	1/16W
R818	1-216-809-11	METAL CHIP	100	5%	1/16W
R819	1-216-837-11	METAL CHIP	22K	5%	1/16W
R820	1-216-809-11	METAL CHIP	100	5%	1/16W
R821	1-216-809-11	METAL CHIP	100	5%	1/16W
R822	1-216-809-11	METAL CHIP	100	5%	1/16W
R823	1-216-833-11	METAL CHIP	10K	5%	1/16W
R824	1-216-833-11	METAL CHIP	10K	5%	1/16W
R825	1-216-821-11	METAL CHIP	1K	5%	1/16W
R826	1-216-849-11	METAL CHIP	220K	5%	1/16W
R827	1-216-845-11	METAL CHIP	100K	5%	1/16W
R828	1-216-849-11	METAL CHIP	220K	5%	1/16W
R829	1-216-809-11	METAL CHIP	100	5%	1/16W
R830	1-216-809-11	METAL CHIP	100	5%	1/16W

Ref. No.	Part No.	Description			Remark
R831	1-216-845-11	METAL CHIP	100K	5%	1/16W (CA600)
R832	1-216-845-11	METAL CHIP	100K	5%	1/16W
R833	1-216-864-11	METAL CHIP	0	5%	1/16W
R834	1-216-864-11	METAL CHIP	0	5%	1/16W
R835	1-216-845-11	METAL CHIP	100K	5%	1/16W
R836	1-216-809-11	METAL CHIP	100	5%	1/16W
R837	1-216-864-11	METAL CHIP	0	5%	1/16W
R838	1-216-821-11	METAL CHIP	1K	5%	1/16W
R839	1-216-821-11	METAL CHIP	1K	5%	1/16W
R840	1-216-821-11	METAL CHIP	1K	5%	1/16W
R841	1-216-864-11	METAL CHIP	0	5%	1/16W
R842	1-216-864-11	METAL CHIP	0	5%	1/16W
R845	1-247-887-00	CARBON	220K	5%	1/4W
R846	1-216-849-11	METAL CHIP	220K	5%	1/16W
R847	1-247-887-00	CARBON	220K	5%	1/4W
R848	1-247-887-00	CARBON	220K	5%	1/4W
R849	1-216-809-11	METAL CHIP	100	5%	1/16W
R850	1-216-809-11	METAL CHIP	100	5%	1/16W
R851	1-216-809-11	METAL CHIP	100	5%	1/16W
R852	1-216-809-11	METAL CHIP	100	5%	1/16W
R853	1-216-809-11	METAL CHIP	100	5%	1/16W
R854	1-216-809-11	METAL CHIP	100	5%	1/16W
R855	1-216-864-11	METAL CHIP	0	5%	1/16W
R856	1-216-864-11	METAL CHIP	0	5%	1/16W
R857	1-216-864-11	METAL CHIP	0	5%	1/16W
R858	1-216-864-11	METAL CHIP	0	5%	1/16W
R859	1-216-864-11	METAL CHIP	0	5%	1/16W
R860	1-216-864-11	METAL CHIP	0	5%	1/16W
R866	1-216-845-11	METAL CHIP	100K	5%	1/16W
R867	1-216-845-11	METAL CHIP	100K	5%	1/16W
R868	1-216-845-11	METAL CHIP	100K	5%	1/16W (CA600)
R869	1-216-845-11	METAL CHIP	100K	5%	1/16W
R901	1-216-821-11	METAL CHIP	1K	5%	1/16W
R903	1-249-425-11	CARBON	4.7K	5%	1/4W
R904	1-216-821-11	METAL CHIP	1K	5%	1/16W
R905	1-216-841-11	METAL CHIP	47K	5%	1/16W
R906	1-216-833-11	METAL CHIP	10K	5%	1/16W
R907	1-216-833-11	METAL CHIP	10K	5%	1/16W
R908	1-216-841-11	METAL CHIP	47K	5%	1/16W
R909	1-216-841-11	METAL CHIP	47K	5%	1/16W
R910	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R911	1-216-845-11	METAL CHIP	100K	5%	1/16W
R913	1-249-427-11	CARBON	6.8K	5%	1/4W
R914	1-216-845-11	METAL CHIP	100K	5%	1/16W
R915	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R916	1-249-404-00	CARBON	82	5%	1/4W
R917	1-249-404-00	CARBON	82	5%	1/4W
R918	1-249-404-00	CARBON	82	5%	1/4W
R919	1-249-404-00	CARBON	82	5%	1/4W
R920	1-249-404-00	CARBON	82	5%	1/4W
R921	1-249-404-00	CARBON	82	5%	1/4W

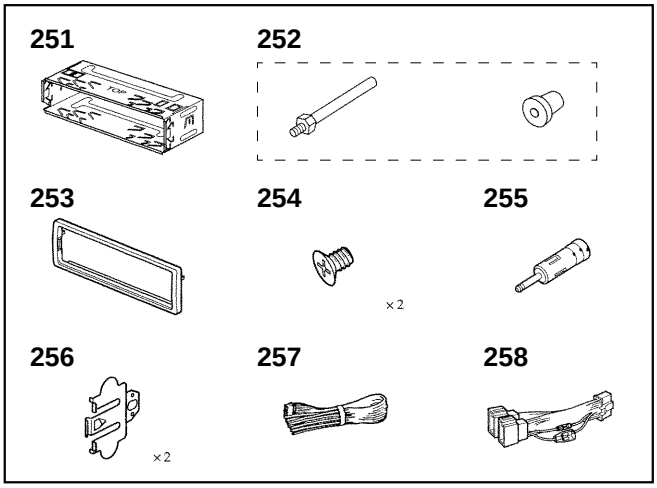
Ref. No.	Part No.	Description			Remark
R922	1-247-816-11	CARBON	240	5%	1/4W
R923	1-216-845-11	METAL CHIP	100K	5%	1/16W
R924	1-249-421-11	CARBON	2.2K	5%	1/4W
R925	1-216-821-11	METAL CHIP	1K	5%	1/16W
R926	1-249-413-11	CARBON	470	5%	1/4W
R927	1-249-417-11	CARBON	1K	5%	1/4W
R930	1-216-845-11	METAL CHIP	100K	5%	1/16W
R931	1-249-421-11	CARBON	2.2K	5%	1/4W
R932	1-216-805-11	METAL CHIP	47	5%	1/16W
R933	1-216-841-11	METAL CHIP	47K	5%	1/16W
R934	1-216-845-11	METAL CHIP	100K	5%	1/16W
R935	1-249-421-11	CARBON	2.2K	5%	1/4W
		< SWITCH >			
S801	1-762-638-21	SWITCH, TACTILE (RESET)			
		< THERMISTOR (POSITIVE) >			
TH900	1-801-792-21	THERMISTOR, POSITIVE			
TH901	1-810-940-11	THERMISTOR, POSITIVE			
		< TUNER >			
TU601	A-3220-812-A	TUNER UNIT (TUX-020)			
		< VIBRATOR >			
X601	1-760-556-31	VIBRATOR, CRYSTAL (4.332MHz)			
X801	1-781-822-21	VIBRATOR, CERAMIC (18.432MHz)			
X802	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
	A-3283-233-A	SERVO BOARD, COMPLETE **********			
	1-683-284-11	FLEXIBLE BOARD			
		< CAPACITOR >			
C1	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-104-609-11	ELECT CHIP	100uF	20%	4V
C5	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C8	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C9	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C10	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C11	1-162-909-11	CERAMIC CHIP	4PF	0.25PF	50V
C13	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C14	1-125-837-00	CERAMIC CHIP	1uF	10%	6.3V
C15	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C16	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C17	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C18	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C19	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C20	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C21	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
C22	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C23	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C24	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C25	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C26	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C27	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C29	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C30	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C34	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C35	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C36	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C37	1-126-393-11	ELECT CHIP	33uF	20%	10V
C38	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C40	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C41	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C43	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C44	1-125-837-00	CERAMIC CHIP	1uF	10%	6.3V
C45	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN1	1-815-352-11	CONNECTOR, BOARD TO BOARD 30P			
CN3	1-816-275-11	CONNECTOR, FFC/FPC 6P			
		< JUMPER RESISTOR >			
FB1	1-216-864-11	METAL CHIP	0	5%	1/16W
FB2	1-216-864-11	METAL CHIP	0	5%	1/16W
FB3	1-216-864-11	METAL CHIP	0	5%	1/16W
FB4	1-216-864-11	METAL CHIP	0	5%	1/16W
FB6	1-216-864-11	METAL CHIP	0	5%	1/16W
FB7	1-216-864-11	METAL CHIP	0	5%	1/16W
		< IC >			
IC1	8-759-699-98	IC uPD63711GC-8EU			
IC2	8-759-658-87	IC BA5810FP-E2			
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-R			
		< RESISTOR >			
R3	1-216-797-11	METAL CHIP	10	5%	1/16W
R5	1-218-344-11	RES-CHIP	7.5K	5%	1/16W
R6	1-216-837-11	METAL CHIP	22K	5%	1/16W
R7	1-216-839-11	METAL CHIP	33K	5%	1/16W
R8	1-216-833-11	METAL CHIP	10K	5%	1/16W
R9	1-216-840-11	METAL CHIP	39K	5%	1/16W
R10	1-216-835-11	METAL CHIP	15K	5%	1/16W
R12	1-216-837-11	METAL CHIP	22K	5%	1/16W
R14	1-216-841-11	METAL CHIP	47K	5%	1/16W
R15	1-216-841-11	METAL CHIP	47K	5%	1/16W
R17	1-216-809-11	METAL CHIP	100	5%	1/16W
R18	1-216-809-11	METAL CHIP	100	5%	1/16W
R19	1-216-809-11	METAL CHIP	100	5%	1/16W

SERVO **SL SW** **SPEAKER**

Ref. No.	Part No.	Description			Remark
R20	1-216-809-11	METAL CHIP	100	5%	1/16W
R21	1-216-821-11	METAL CHIP	1K	5%	1/16W
R22	1-216-821-11	METAL CHIP	1K	5%	1/16W
R24	1-216-864-11	METAL CHIP	0	5%	1/16W
R25	1-216-864-11	METAL CHIP	0	5%	1/16W
R26	1-216-797-11	METAL CHIP	10	5%	1/16W
R29	1-216-833-11	METAL CHIP	10K	5%	1/16W
R30	1-216-833-11	METAL CHIP	10K	5%	1/16W
		< SWITCH >			
SW1	1-762-944-12	SWITCH, DETECTION (SMALL TYPE) (DOWN)			
		< VIBRATOR >			
X1	1-795-520-21	VIBRATOR, CERAMIC (16.9344MHz)			
**********					
	1-683-282-11	SL SW BOARD			
		**********			
		< SWITCH >			
SW4	1-529-565-41	SWITCH, PUSH (1 KEY) (LIMIT)			
**********					
	1-683-930-11	SPEAKER BOARD (supplied with MAIN BOARD, COMPLETE)			
		**********			
**********					
		MISCELLANEOUS			
		**********			
3	1-776-207-82	CORD (WITH CONNECTOR) (POWER) (E)			
3	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)			(AEP,UK)
201	X-3378-480-1	CHASSIS (OP) ASSY (including M901)			
207	1-823-641-11	CABLE, FLEXIBLE FLAT (6 CORE)			
⚠210	8-820-103-11	PICK-UP, OPTICAL KSS-720A/C-RP			
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)			
M903	A-3315-039-A	MOTOR SUB ASSY, LO (LOADING)			
**********					

Ref. No.	Part No.	Description	Remark
		ACCESSORIES	
		**********	
	1-476-526-31	REMOTE COMMANDER (RM-X115) (E)	
	3-230-047-01	LID, BATTERY CASE (for RM-X115) (E)	
	3-238-730-11	MANUAL, INSTRUCTION (ENGLISH,GERMAN, FRENCH,ITALIAN,DUTCH)	(AEP,UK)
	3-238-730-21	MANUAL, INSTRUCTION (ENGLISH, TRADITIONAL CHINESE) (E)	
	3-238-731-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, GERMAN,FRENCH,ITALIAN,DUTCH)	(AEP,UK)
	3-238-731-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, TRADITIONAL CHINESE) (E)	
	X-3380-054-2	CASE ASSY (for FRONT PANEL)	
**********			
		PARTS FOR INSTALLATION AND CONNECTION	
		**********	
251	3-014-370-21	FRAME, FITTING	
252	X-3366-405-1	SCREW ASSY (EXP), FITTING	
253	3-236-923-01	COLLAR	
254	3-934-325-01	SCREW (+K 5X8 TP)	
255	1-465-459-21	ADAPTOR, ANTENNA (AEP,UK)	
256	3-030-929-04	SPRING, FITTING	
257	1-776-207-82	CORD (WITH CONNECTOR) (POWER) (E)	
258	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

CDX-CA600/CA600X

SONY

SERVICE MANUAL

Ver 1.1 2002. 04

AEP Model
UK Model
CDX-CA600/CA600X
E Model
CDX-CA600X

SUPPLEMENT-1

File this supplement with the service manual.

Subject : Change of a production country

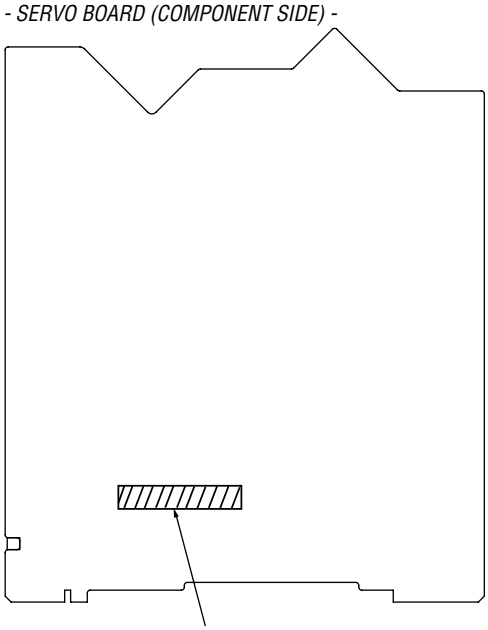
(ENG-02002)

- **CHANGE OF THE OVERALL ASSY CHANGE OF A PRODUCTION COUNTRY**

The production country was changed from Korean to Thailand in the production process.
Check the part No. for the servo and main boards when servicing and inspecting the set.

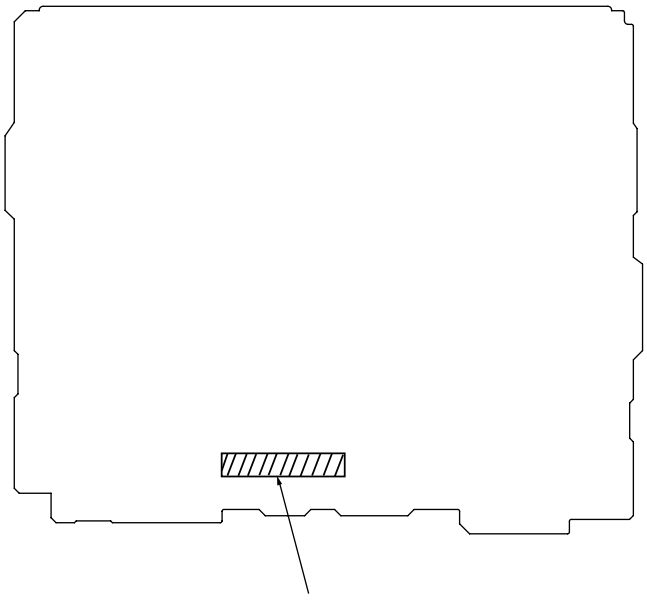
Discrimination

- SERVO BOARD (COMPONENT SIDE) -



SERVO BOARD Part No.
Korean production :1-683-949-11
Thailand production :1-683-660-11

- MAIN BOARD (COMPONENT SIDE) -

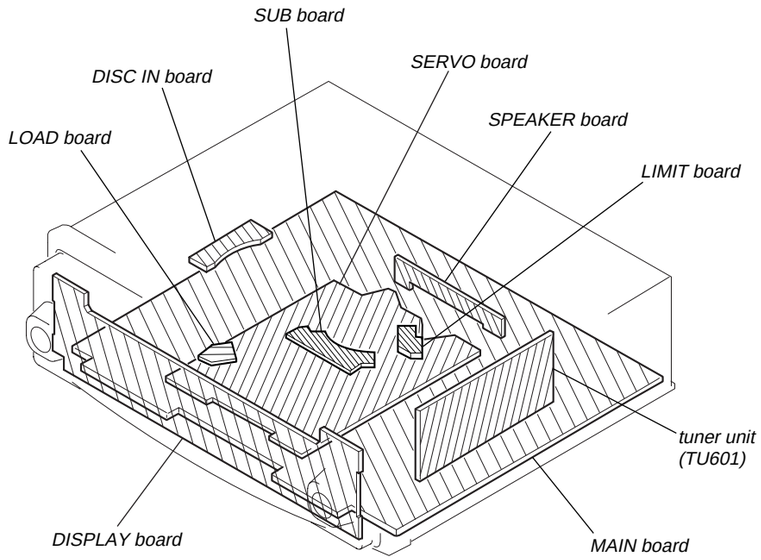


MAIN BOARD Part No.
Korean production :1-683-929-11
Thailand production :1-685-146-11

TABLE OF CONTENTS

1. Circuit Boards Location 3
2. Printed Wiring Boards –CD Mechanism Section– 4
3. Schematic Diagram –CD Mechanism Section– 6
4. Printed Wiring Boards –Main Section– 7
5. Schematic Diagram –Main Section (1/2)– 8
6. Schematic Diagram –Main Section (2/2)– 9
7. Exploded Views
7-1. Chassis Section 12
7-2. CD Mechanism Section (1) 13
7-3. CD Mechanism Section (2) 14
7-4. CD Mechanism Section (3) 15
8. Electrical Parts List 16

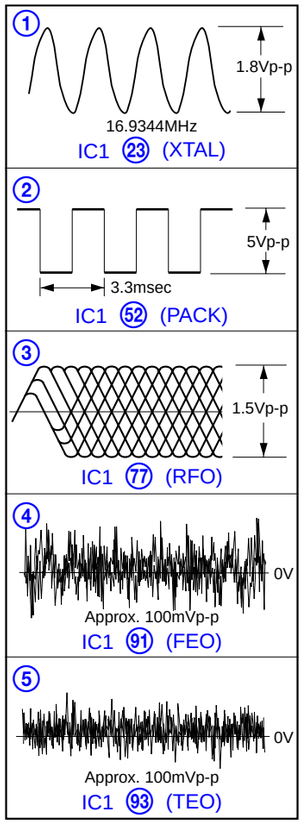
1. CIRCUIT BOARDS LOCATION



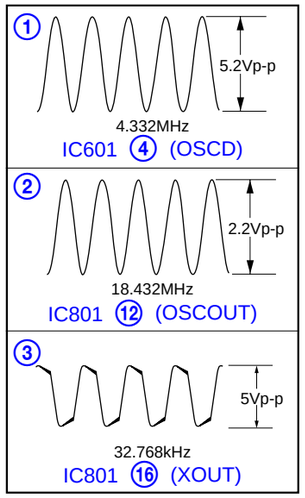
• Waveforms

— Servo Board —

(MODE: CD PLAY)



— Main Board —



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for schematic diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : MW/LW
  - ⇉ : CD

for printed wiring boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

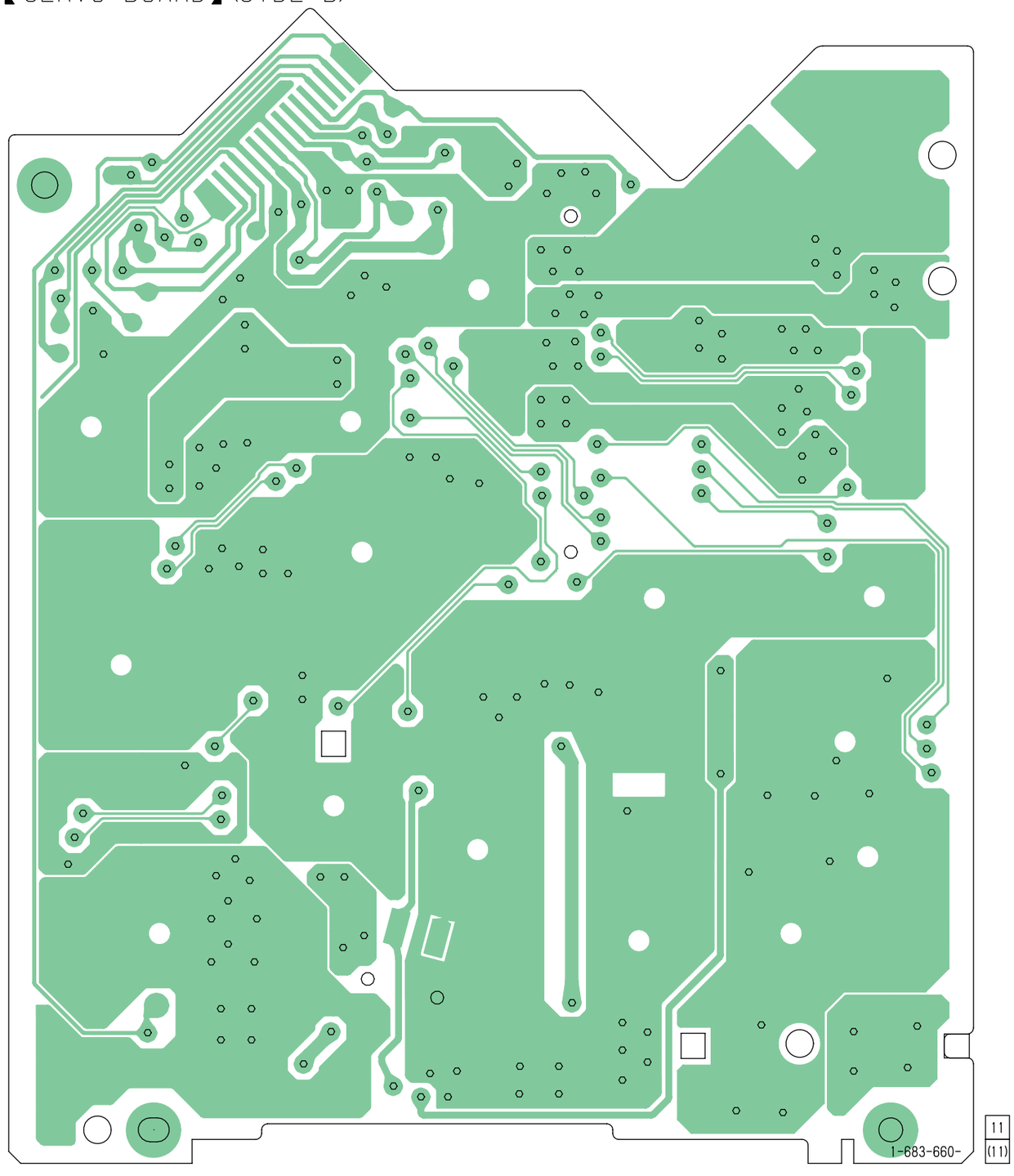
- ( ) : Refer to page of Supplement-1.
- (( )) : Refer to page of Service manual.

2. PRINTED WIRING BOARDS — CD MECHANISM SECTION — • Refer to page 3 for Circuit Boards Location.

14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J

【SERVO BOARD】(SIDE B)



【SERVO BOARD】(SIDE A)

【PICK-UP FLEXIBLE BOARD】 1-683-666- 11

OPTICAL PICK-UP KSS-720A

- **Semiconductor Location**

Ref. No.	Location
IC1	E-7
IC2	H-7
Q1	C-6

1 MAIN BOARD CNP701 (Page 7)

【DISC IN BOARD】

SW1 (DISC IN)

SW2 (SELF)

BLK
WHT
RED

1-659-836- 11 (12)

【LIMIT BOARD】

SW3 (LIMIT)

BLU
BLU

1-659-835- 12 (12)

M903 (LOADING)

RED
WHT

【LOAD BOARD】

SW4 (DOWN)

BLU
BLU

1-659-837- 11 (12)

【SUB BOARD】

YEL
BLU
BLU

CN1

1-659-834- 11 (12)

M902 (SLED)

M901 (SPINDLE)

RED
WHT
BLK

BLU
BLK
BLU
RED
WHT

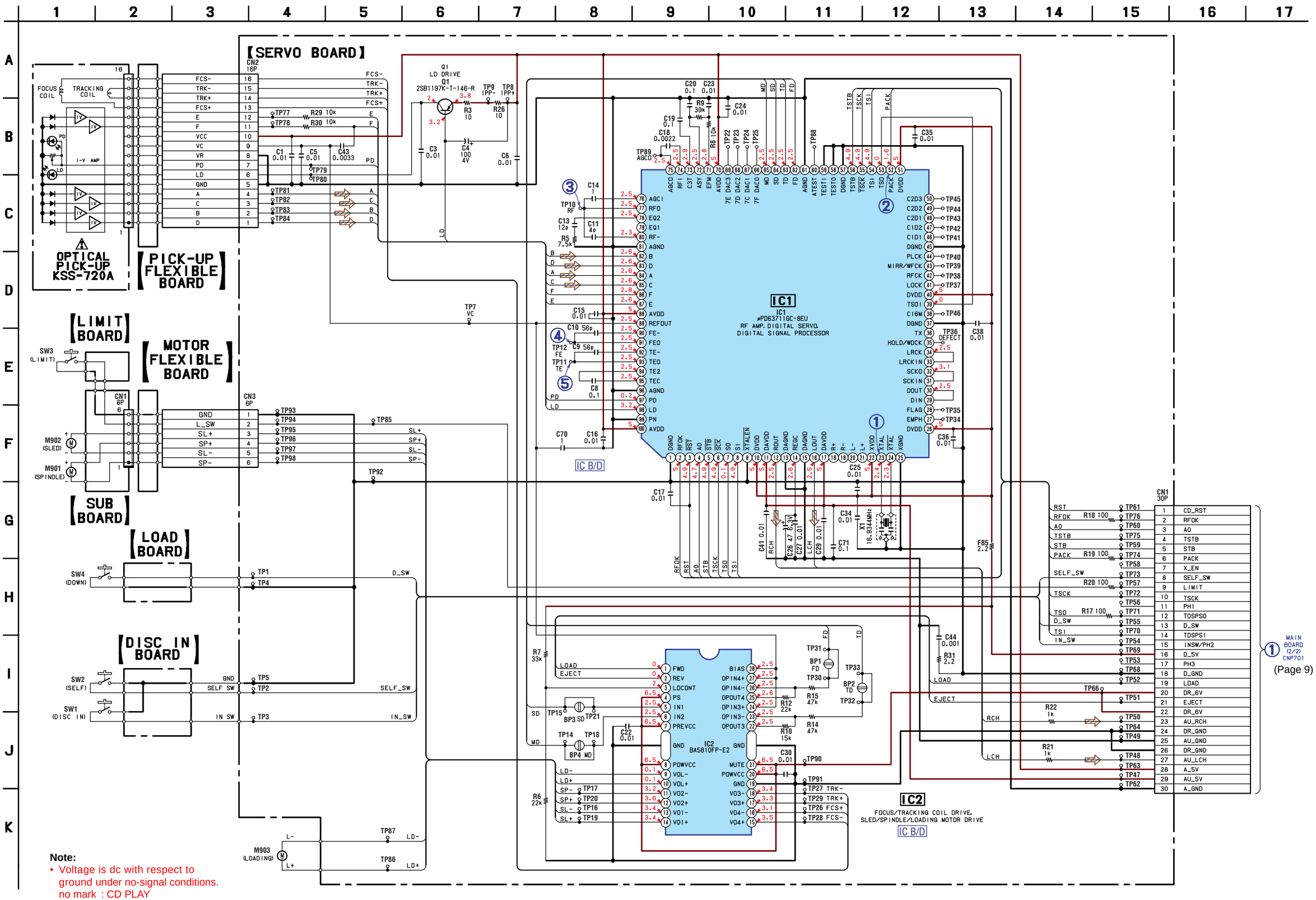
1-683-660- 11 (11)

【MOTOR FLEXIBLE BOARD】 1-683-665- 11

• Refer to page 3 for Waveforms.

3. SCHEMATIC DIAGRAM — CD MECHANISM SECTION —

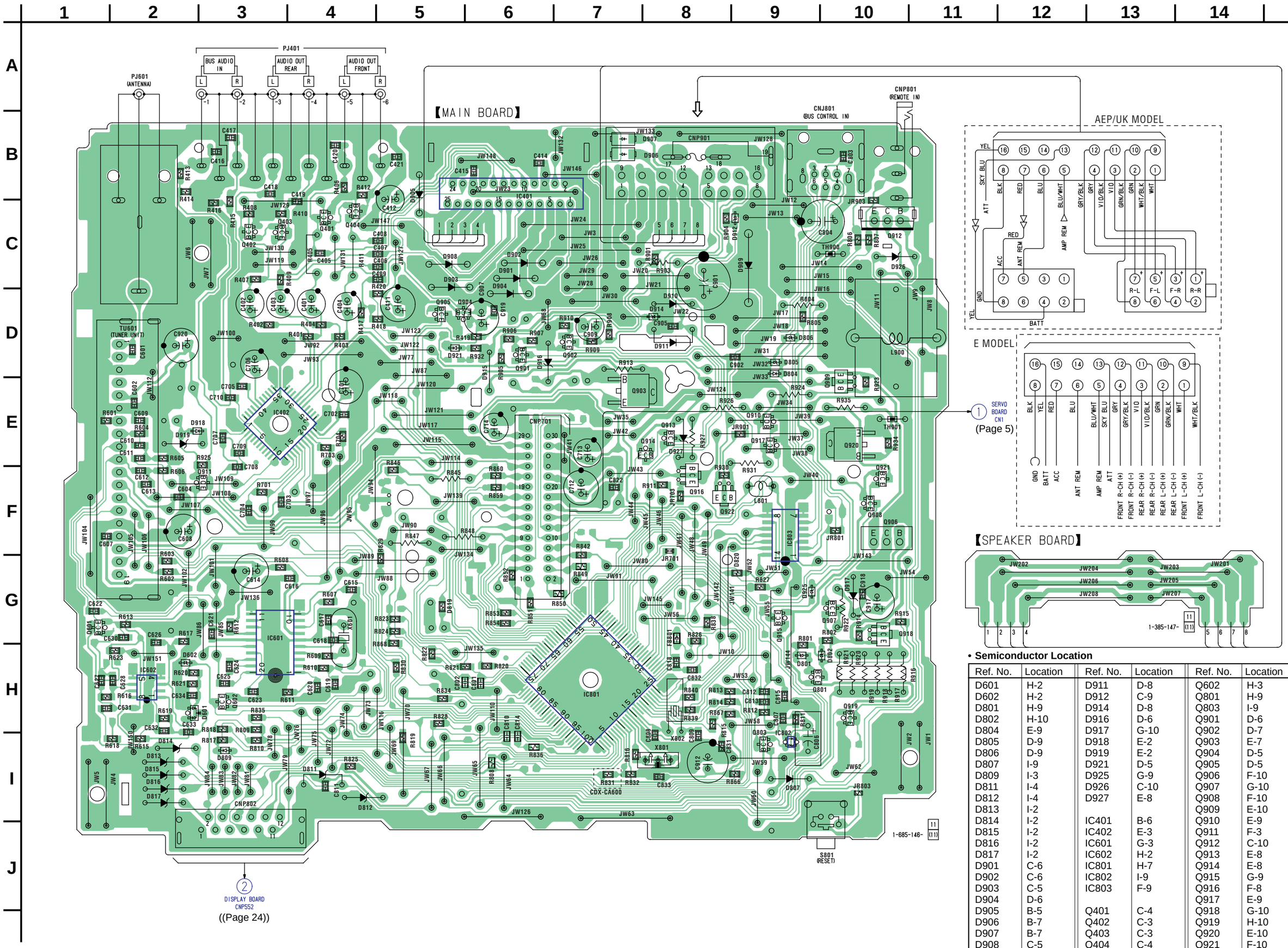
• Refer to page 10 for IC Block Diagrams.



Note:

- Voltage is dc with respect to ground under no-signal conditions. no mark : CD PLAY

4. PRINTED WIRING BOARDS — MAIN SECTION — • Refer to page 3 for Circuit Boards Location.

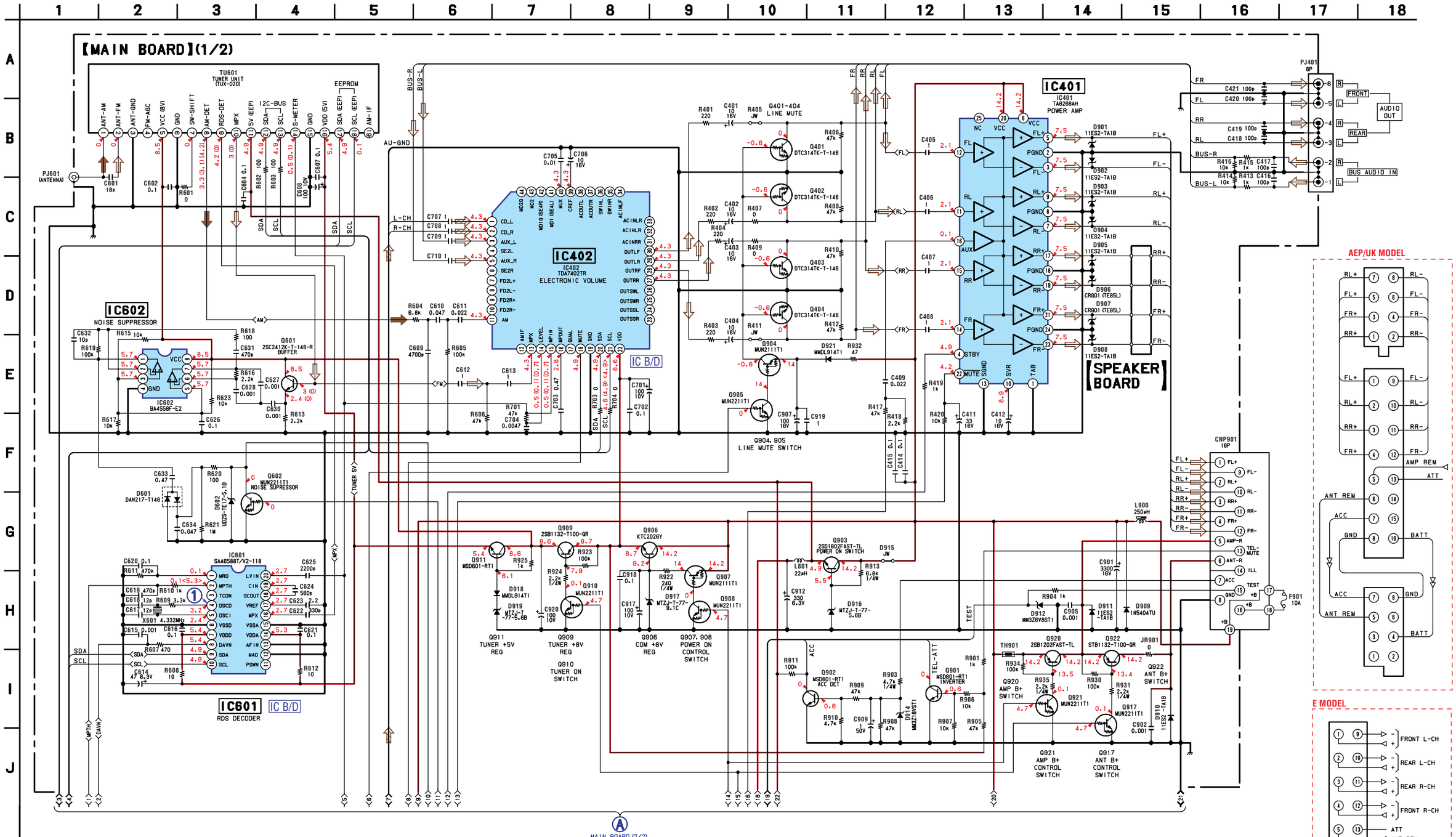


• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D601	H-2	D911	D-8	Q602	H-3
D602	H-2	D912	C-9	Q801	H-9
D801	H-9	D914	D-8	Q803	I-9
D802	H-10	D916	D-6	Q901	D-6
D804	E-9	D917	G-10	Q902	D-7
D805	D-9	D918	E-2	Q903	E-7
D806	D-9	D919	E-2	Q904	D-5
D807	I-9	D921	D-5	Q905	D-5
D809	I-3	D925	G-9	Q906	F-10
D811	I-4	D926	C-10	Q907	G-10
D812	I-4	D927	E-8	Q908	F-10
D813	I-2			Q909	E-10
D814	I-2	IC401	B-6	Q910	E-9
D815	I-2	IC402	E-3	Q911	F-3
D816	I-2	IC601	G-3	Q912	C-10
D817	I-2	IC602	H-2	Q913	E-8
D901	C-6	IC801	H-7	Q914	E-8
D902	C-6	IC802	I-9	Q915	G-9
D903	C-5	IC803	F-9	Q916	F-8
D904	D-6			Q917	E-9
D905	B-5	Q401	C-4	Q918	G-10
D906	B-7	Q402	C-3	Q919	H-10
D907	B-7	Q403	C-3	Q920	E-10
D908	C-5	Q404	C-4	Q921	F-10
D909	C-9	Q601	G-1	Q922	F-8
D910	D-8				

5. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) —

• Refer to page 3 for Waveform.
• Refer to page 10 for IC Block Diagrams.

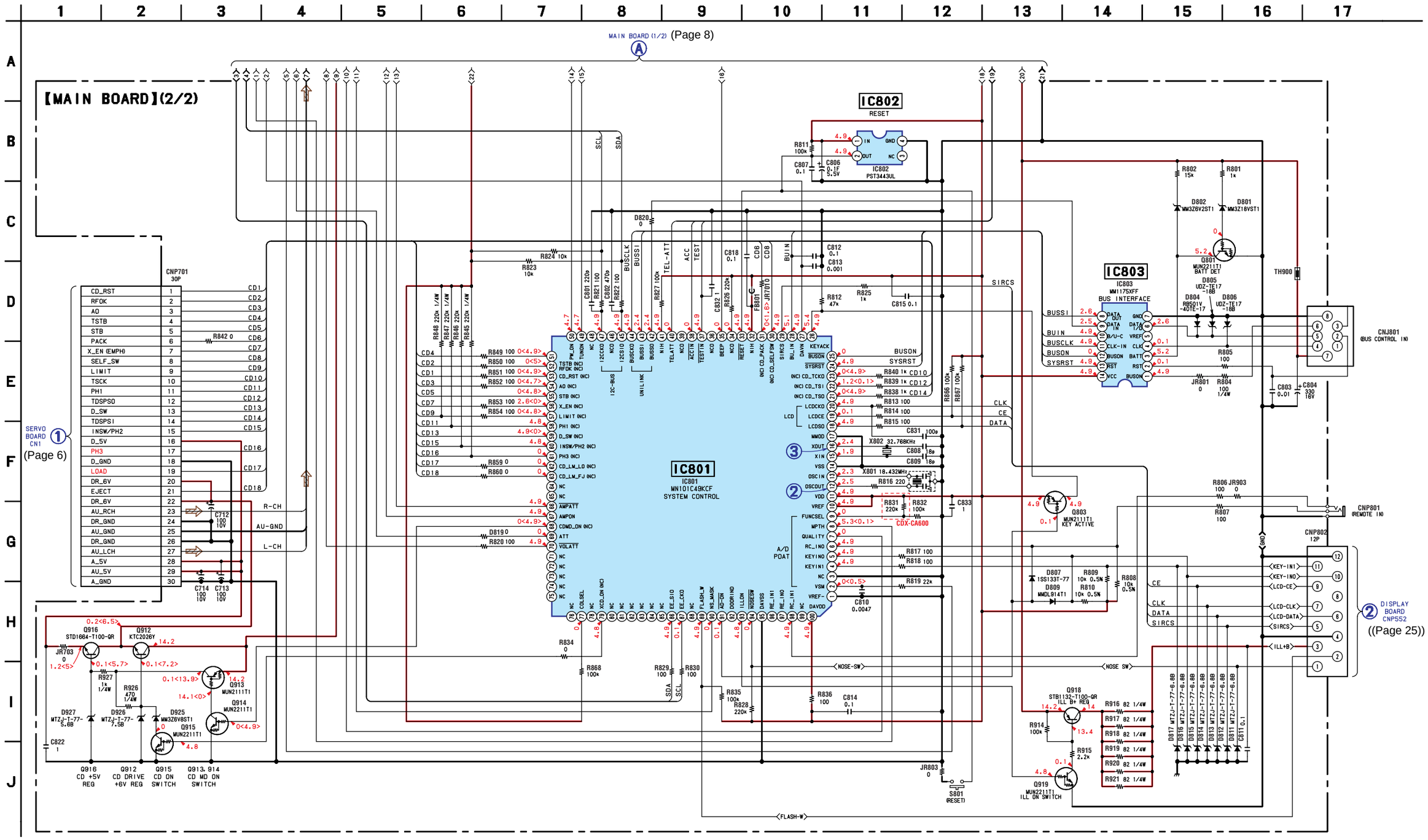


(Page 9)

Note:

- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : MW/LW
  < > : CD PLAY

6. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 3 for Waveforms.

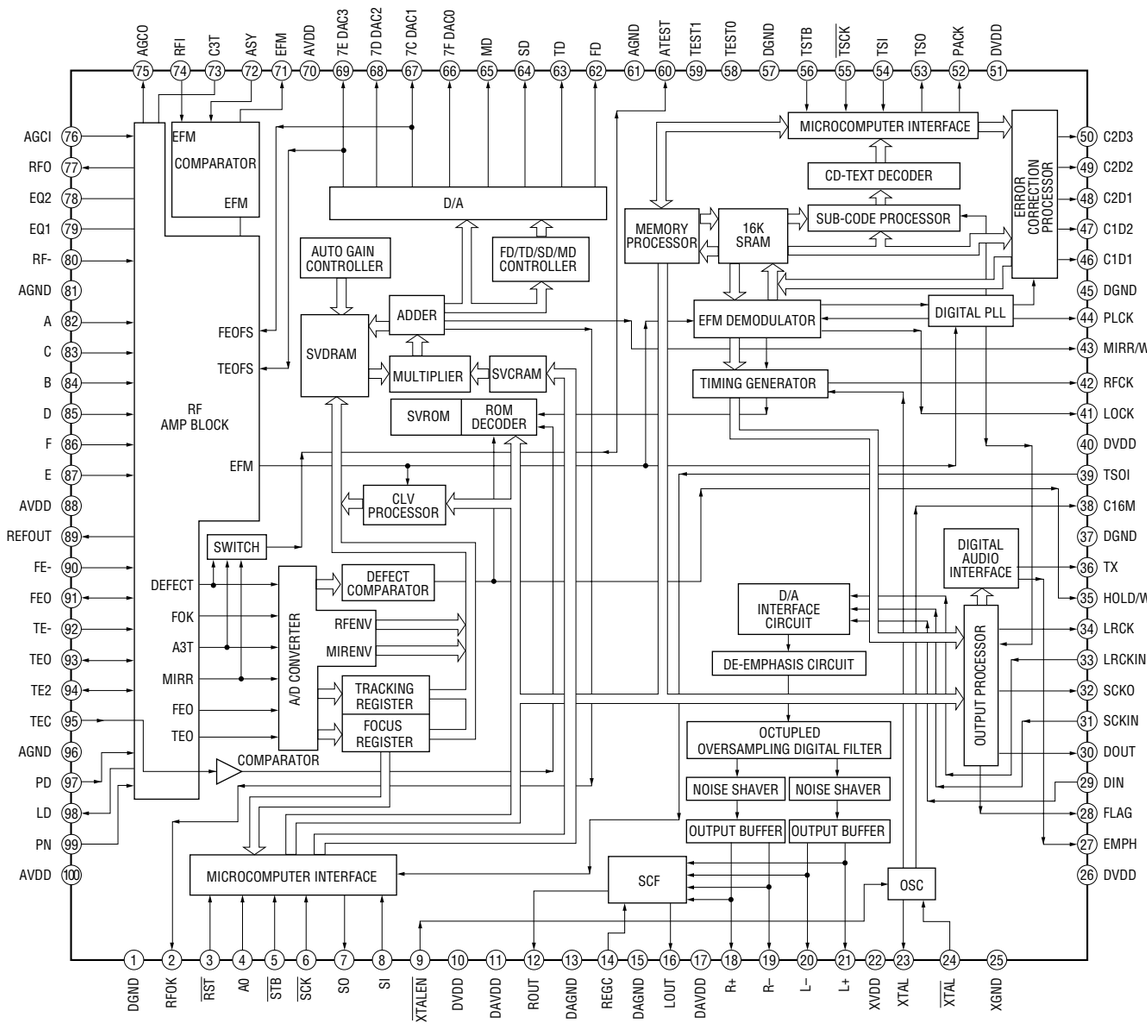


Note:

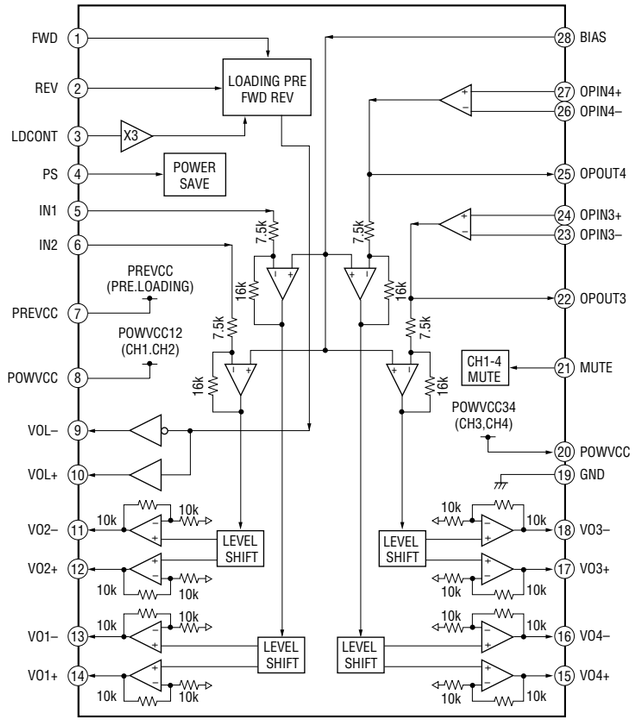
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : MW/LW
  < > : CD PLAY

• IC BLOCK DIAGRAMS

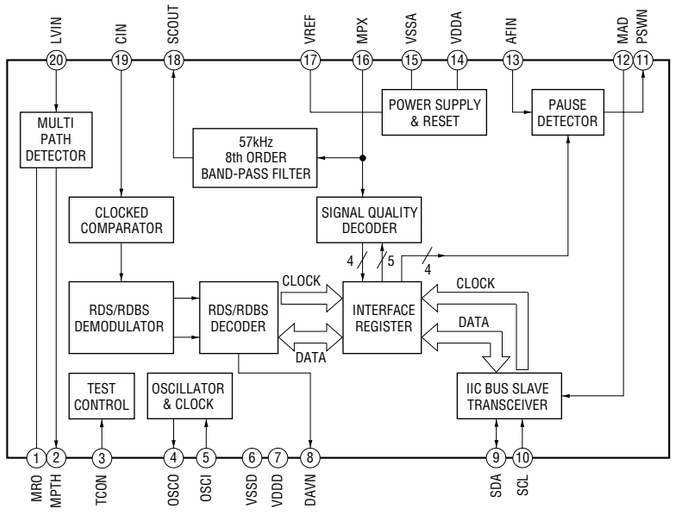
IC1 µPD63711GC-8EU



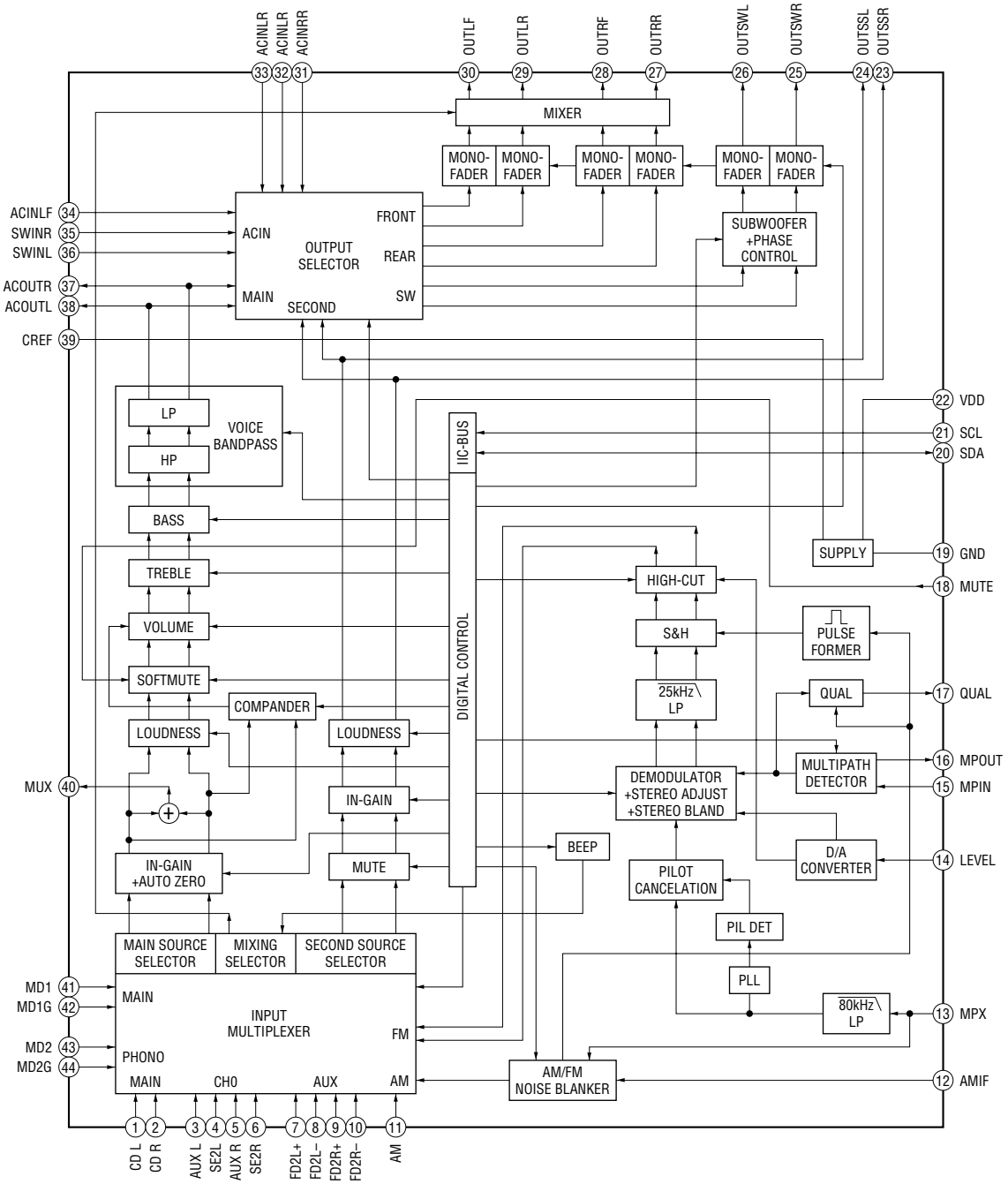
IC2 BA5810FP-E2



IC601 SAA6588T/V2-118



IC402 TDA7402TR



7. EXPLODED VIEWS

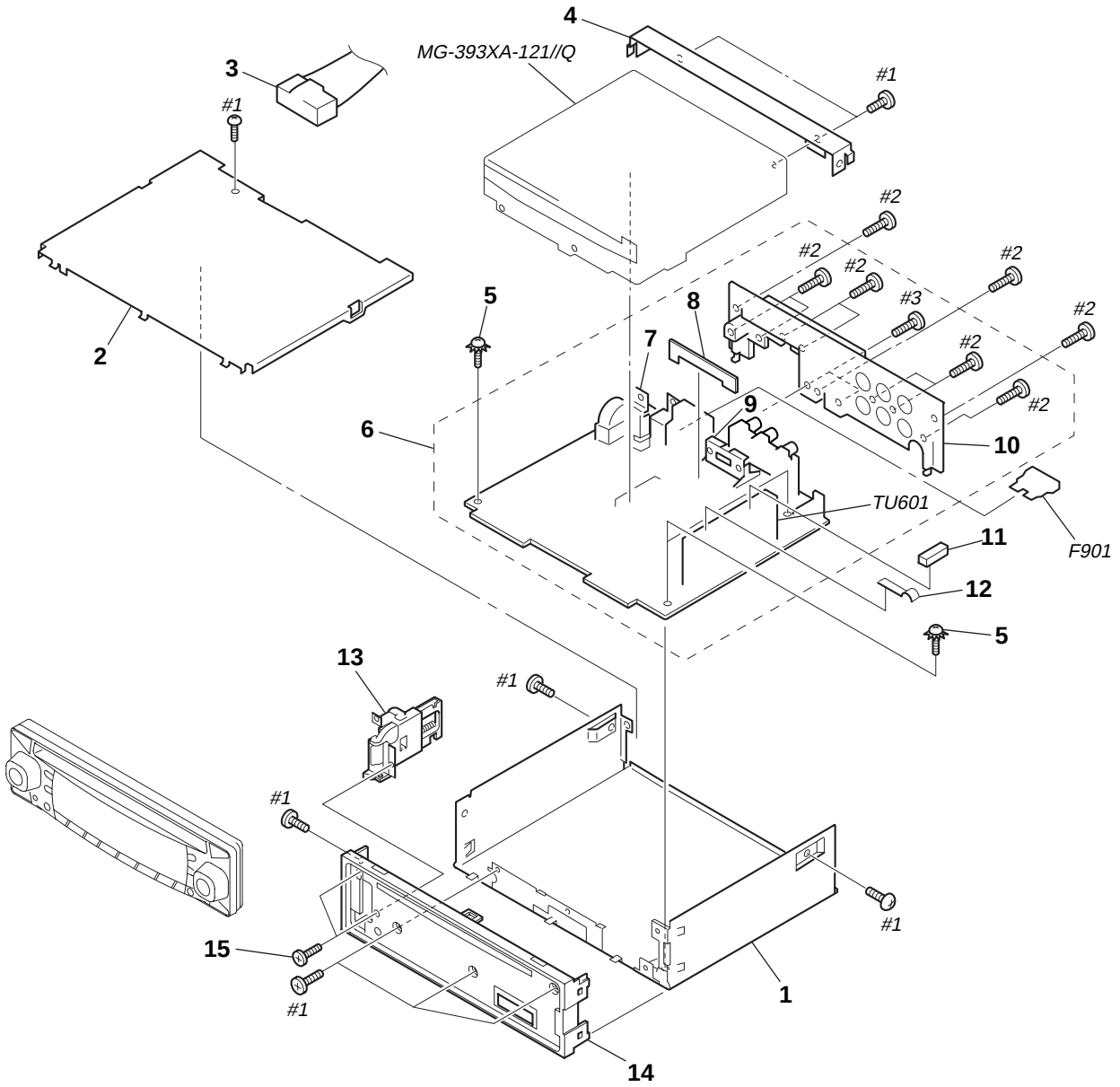
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ ↑
  Parts Color Cabinet's Color

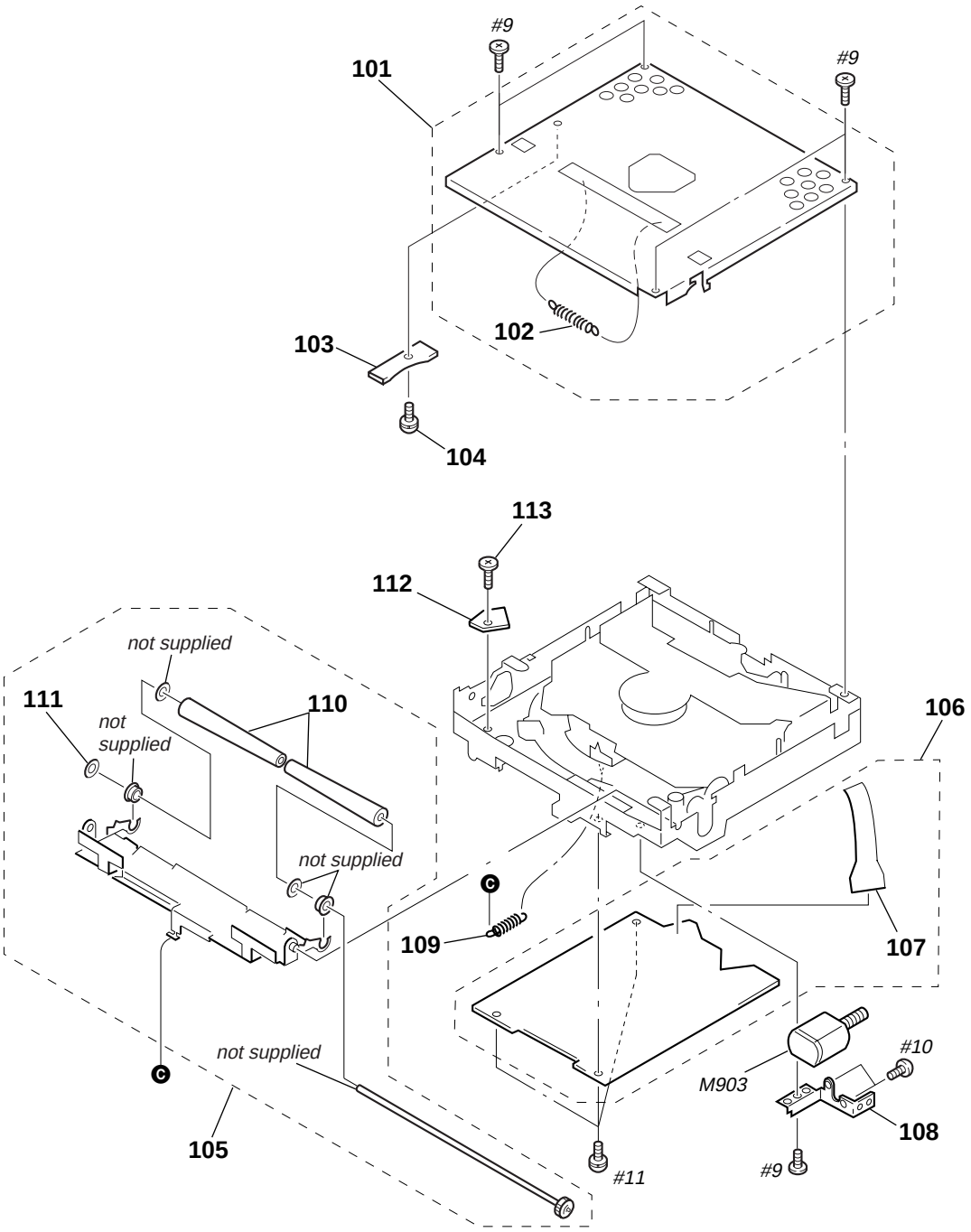
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-240-747-01	CHASSIS	
2	3-040-995-21	COVER	
3	1-776-207-82	CORD (WITH CONNECTOR) (POWER) (E)	
3	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK)
4	3-241-071-01	BRACKET (CD)	
5	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
6	A-3274-284-A	MAIN BOARD, COMPLETE (CA600X)	
6	A-3340-385-A	MAIN BOARD, COMPLETE (CA600)	
7	3-041-261-11	BRACKET (TR)	
8	1-685-147-11	SPEAKER BOARD	
* 9	3-040-998-01	BRACKET (IC)	
* 10	3-040-996-22	HEAT SINK (6P)	
* 11	3-045-877-02	CUSHION (TU)	
* 12	3-045-878-01	PLATE (TU), GROUND	
13	X-3379-876-3	LOCK ASSY (S)	
14	X-3381-269-1	PANEL (1) ASSY, SUB	
15	3-042-244-11	SCREW (T)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TU601	A-3220-812-A	TUNER UNIT (TUX-020)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#3	7-685-795-09	SCREW +PTT 2.6X12 (S)	

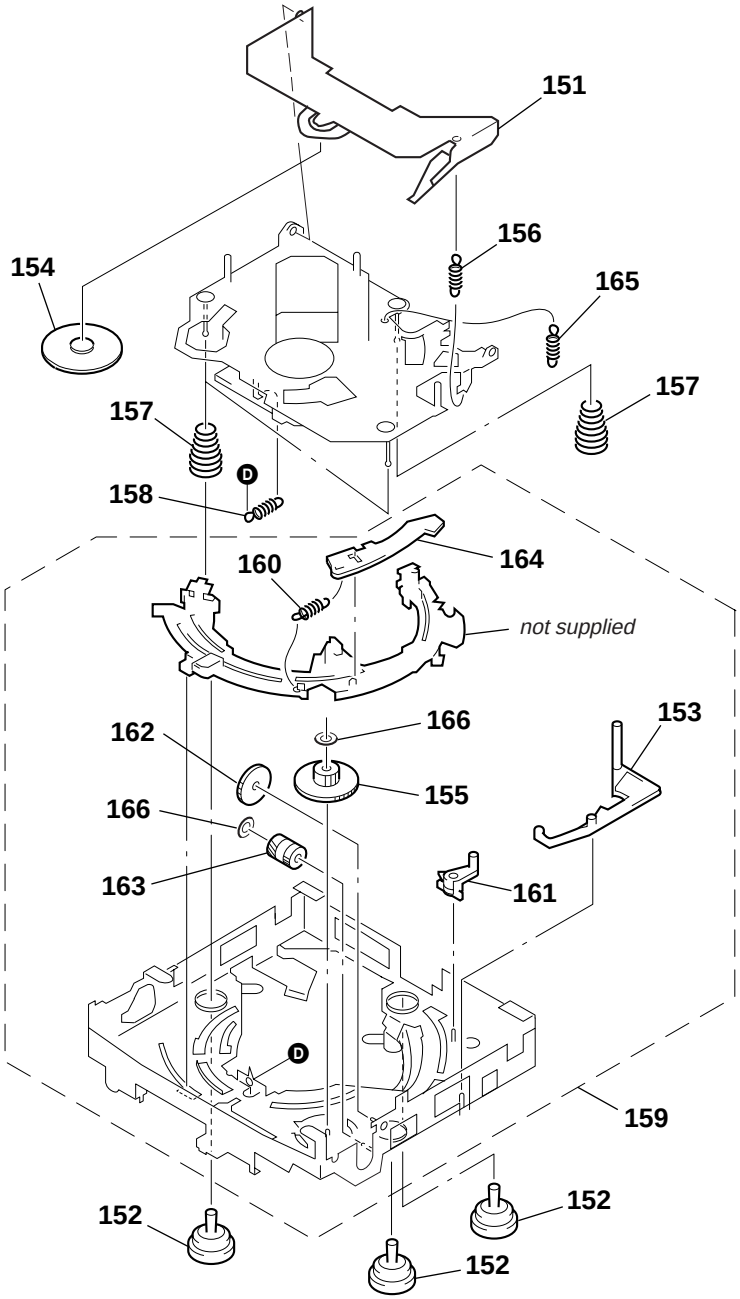
7-2. CD MECHANISM SECTION (1)
(MG-393XA-121//Q)



Ref. No.	Part No.	Description	Remark
101	A-3315-247-B	CHASSIS (T.U) ASSY	
102	3-931-909-01	SPRING (LR), TENSION	
103	1-659-836-11	DISC IN BOARD	
104	3-338-737-01	SCREW (2X3), +PS	
105	A-3315-040-A	ROLLER ASSY, ARM	
106	A-3283-270-A	SERVO BOARD, COMPLETE	
107	1-683-666-11	PICK-UP FLEXIBLE BOARD	
* 108	3-039-629-02	BRACKET (MOTOR)	
109	3-225-784-01	SPRING (RA3), TENSION	

Ref. No.	Part No.	Description	Remark
110	3-933-152-03	ROLLER (S)	
111	3-931-913-11	RING (ROLLER), RETAINING	
112	1-659-837-11	LOAD BOARD	
113	3-338-737-01	SCREW (2X3), +PS	
M903	A-3315-039-A	MOTOR SUB ASSY, LD (LOADING)	
#9	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE3	
#10	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE3	
#11	7-628-253-00	SCREW +PS 2X4	

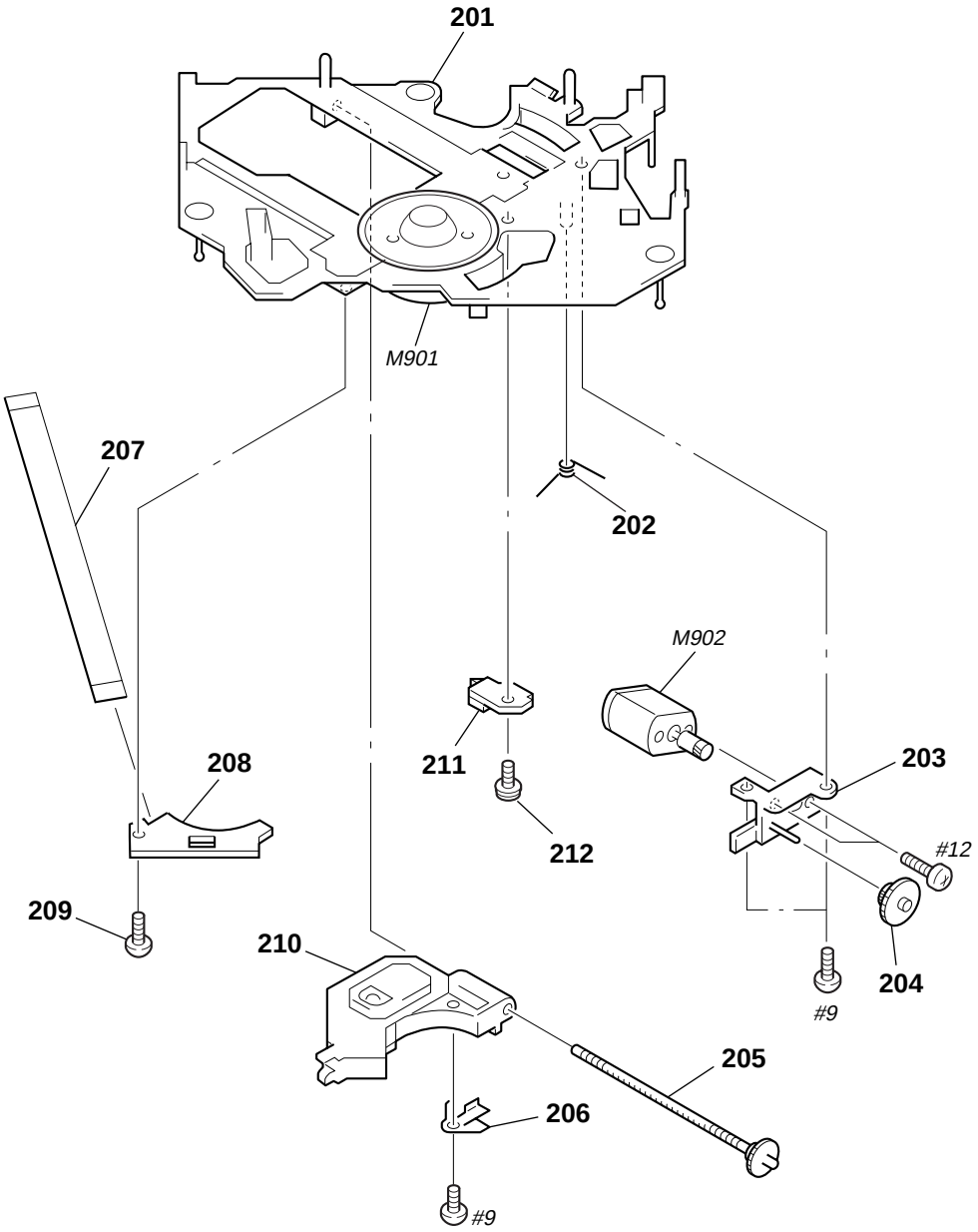
7-3. CD MECHANISM SECTION (2)
(MG-393XA-121//Q)



Ref. No.	Part No.	Description	Remark
151	X-3378-956-8	ARM ASSY, CHUCKING	
152	3-931-897-61	DAMPER (T)	
153	3-039-627-01	LEVER (D)	
154	3-040-165-02	RETAINER (DISC)	
155	3-014-727-01	WHEEL (LW), WORM	
156	3-931-895-01	SPRING (CH), TENSION	
157	3-931-898-01	SPRING (FL), COMPRESSION	
158	3-032-483-02	SPRING (KF1), TENSION	

Ref. No.	Part No.	Description	Remark
159	A-3315-243-D	CHASSIS (M) ASSY	
160	3-220-180-01	SPRING (TR2), TENSION	
161	3-931-881-03	LEVER (LOCK)	
162	3-931-882-02	GEAR (MDL)	
163	3-007-537-11	WHEEL (U), WORM	
164	3-039-626-01	LEVER (TR)	
165	3-032-484-01	SPRING (KR1), TENSION	
166	3-018-272-01	WASHER	

7-4. CD MECHANISM SECTION (3)
(MG-393XA-121//Q)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
201	X-3381-611-1	CHASSIS (OP) ASSY (including M901)	
202	3-043-494-01	SPRING (SL), TORSION	
203	3-040-170-01	BASE (DRIVING)	
204	3-040-419-01	GEAR (MIDWAY)	
205	A-3291-669-A	SHAFT (FEED) ASSY	
206	3-025-743-01	SPRING (FEED), LEAF	
207	1-683-665-11	MOTOR FLEXIBLE BOARD	
208	1-659-834-11	SUB BOARD	
209	3-909-607-01	SCREW	
⚠210	8-820-103-11	PICK-UP, OPTICAL KSS-720A/C-RP	
211	1-659-835-12	LIMIT BOARD	
212	3-338-737-01	SCREW (2X3), +PS	
M902	A-3291-674-A	MOTOR ASSY, SLED (SLED)	
#9	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE3	
#12	7-627-850-28	SCREW, PRECISION +P 1.4X3	

8. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	1-659-836-11	DISC IN BOARD			
		**********			
		< SWITCH >			
SW1	1-529-566-31	SWITCH, PUSH (1 KEY) (DISC IN)			
SW2	1-529-566-31	SWITCH, PUSH (1 KEY) (SELF)			
**********					
	1-659-835-12	LIMIT BOARD			
		**********			
		< SWITCH >			
SW3	1-529-565-41	SWITCH, PUSH (1 KEY) (LIMIT)			
**********					
	1-659-837-11	LOAD BOARD			
		**********			
		< SWITCH >			
SW4	1-529-566-31	SWITCH, PUSH (1 KEY) (DOWN)			
**********					
	A-3274-284-A	MAIN BOARD, COMPLETE (CA600X) (including SPEAKER BOARD)			
	A-3340-385-A	MAIN BOARD, COMPLETE (CA600) (including SPEAKER BOARD)			
		**********			
*	3-040-996-22	HEAT SINK (6P)			
*	3-040-998-01	BRACKET (IC)			
	3-041-261-11	BRACKET (TR)			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			
		< CAPACITOR >			
C401	1-124-233-11	ELECT	10uF	20%	16V
C402	1-124-233-11	ELECT	10uF	20%	16V
C403	1-124-233-11	ELECT	10uF	20%	16V
C404	1-124-233-11	ELECT	10uF	20%	16V
C405	1-115-156-11	CERAMIC CHIP	1uF		10V
C406	1-115-156-11	CERAMIC CHIP	1uF		10V
C407	1-115-156-11	CERAMIC CHIP	1uF		10V
C408	1-115-156-11	CERAMIC CHIP	1uF		10V
C409	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C411	1-124-242-00	ELECT	33uF	20%	25V
C412	1-124-233-11	ELECT	10uF	20%	16V
C414	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C415	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C416	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C417	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C418	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C419	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C420	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C421	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C601	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C602	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C604	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C607	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C608	1-124-584-00	ELECT	100uF	20%	10V
C609	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C610	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C611	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C612	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C613	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C614	1-124-589-11	ELECT	47uF	20%	16V
C615	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C616	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C617	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C618	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C619	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C620	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C621	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C622	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C623	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C624	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C625	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C626	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C627	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C628	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C630	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C631	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C632	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C633	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C634	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C701	1-124-584-00	ELECT	100uF	20%	10V
C702	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C703	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C704	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C705	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C706	1-124-233-11	ELECT	10uF	20%	16V
C707	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C708	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V

Ref. No.	Part No.	Description			Remark
C709	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C710	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C712	1-124-584-00	ELECT	100uF	20%	10V
C713	1-124-584-00	ELECT	100uF	20%	10V
C714	1-124-584-00	ELECT	100uF	20%	10V
C801	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C802	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C803	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C804	1-124-119-00	ELECT	330uF	20%	16V
C806	1-125-710-11	DOUBLE LAYERS	0.1F		5.5V
C807	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C808	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C809	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C810	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C811	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C812	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C813	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C814	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C815	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C818	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C822	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C831	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C832	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C833	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C901	1-135-473-21	ELECT	3300uF	20%	16V
C902	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C905	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C907	1-125-972-61	ELECT	100uF	20%	16V
C909	1-126-160-11	ELECT	1uF	20%	50V
C912	1-128-057-11	ELECT	330uF	20%	6.3V
C917	1-124-584-00	ELECT	100uF	20%	10V
C918	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C919	1-115-156-11	CERAMIC CHIP	1uF		10V
C920	1-124-584-00	ELECT	100uF	20%	10V
		< CONNECTOR >			
CNJ801	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)			
CNP701	1-764-617-12	PIN, CONNECTOR (PC BOARD) 30P			
CNP802	1-794-311-21	PLUG, CONNECTOR 12P			
CNP901	1-774-701-11	PIN, CONNECTOR 16P			
		< JACK >			
CNP801	1-566-822-41	JACK (REMOTE IN)			
		< DIODE >			
D601	8-719-987-69	DIODE DAN217			
D602	8-719-069-54	DIODE UDZS-TE17-5.1B			
D801	8-719-056-93	DIODE UDZ-TE-17-18B			
D802	8-719-056-82	DIODE UDZ-TE-17-6.2B			
D804	8-719-058-24	DIODE RB501V-40TE-17			
D805	8-719-056-93	DIODE UDZ-TE-17-18B			
D806	8-719-056-93	DIODE UDZ-TE-17-18B			
D807	8-719-991-33	DIODE 1SS133T-77			
D809	8-719-081-97	DIODE MMDL914T1			
D811	8-719-109-97	DIODE RD6.8ES-B2			
D812	8-719-109-97	DIODE RD6.8ES-B2			
D813	8-719-109-97	DIODE RD6.8ES-B2			
D814	8-719-109-97	DIODE RD6.8ES-B2			

Ref. No.	Part No.	Description			Remark
D815	8-719-109-97	DIODE RD6.8ES-B2			
D816	8-719-109-97	DIODE RD6.8ES-B2			
D817	8-719-109-97	DIODE RD6.8ES-B2			
D901	8-719-200-82	DIODE 11ES2			
D902	8-719-200-82	DIODE 11ES2			
D903	8-719-200-82	DIODE 11ES2			
D904	8-719-200-82	DIODE 11ES2			
D905	8-719-200-82	DIODE 11ES2			
D906	8-719-081-83	DIODE CRG01(TE85L)			
D907	8-719-081-83	DIODE CRG01(TE85L)			
D908	8-719-200-82	DIODE 11ES2			
D909	8-719-049-38	DIODE 1N5404TU			
D910	8-719-200-82	DIODE 11ES2			
D911	8-719-200-82	DIODE 11ES2			
D912	8-719-056-83	DIODE UDZ-TE-17-6.8B			
D914	8-719-056-93	DIODE UDZ-TE-17-18B			
D916	8-719-109-89	DIODE RD5.6ES-B2			
D917	8-719-110-14	DIODE RD9.1ES-B3			
D918	8-719-081-97	DIODE MMDL914T1			
D919	8-719-109-89	DIODE RD5.6ES-B2			
D921	8-719-081-97	DIODE MMDL914T1			
D925	8-719-056-83	DIODE UDZ-TE-17-6.8B			
D926	8-719-921-63	DIODE MTZJ-7.5B			
D927	8-719-109-89	DIODE RD5.6ES-B2			
		< FERRITE BEAD >			
FB801	1-414-235-22	INDUCTOR, FERRITE BEAD			
		< IC >			
IC401	8-759-827-14	IC TA8268AH			
IC402	8-759-653-27	IC TDA7402TR			
IC601	8-759-492-59	IC SAA6588T-118			
IC602	8-759-909-71	IC BA4558F			
IC801	6-801-174-01	IC MN101C49KCF			
IC802	6-701-405-01	IC PST3443UL			
IC803	8-759-096-16	IC MM1175XFF			
		< JUMPER RESISTOR >			
D819	1-216-295-11	SHORT CHIP	0		
D820	1-216-295-11	SHORT CHIP	0		
JR701	1-216-864-11	METAL CHIP	0	5%	1/10W
JR703	1-216-864-11	METAL CHIP	0	5%	1/10W
JR801	1-216-864-11	METAL CHIP	0	5%	1/10W
JR803	1-216-295-11	SHORT CHIP	0		
JR901	1-216-864-11	METAL CHIP	0	5%	1/10W
JR903	1-216-864-11	METAL CHIP	0	5%	1/10W
		< COIL >			
L801	1-410-513-11	INDUCTOR	22uH		
L900	1-419-476-11	COIL, CHOKE	250uH		
		< JACK >			
PJ401	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN, AUDIO OUT REAR/FRONT)			
PJ601	1-815-185-12	JACK (ANTENNA)			

MAIN

Ref. No.	Part No.	Description		Remark
		< TRANSISTOR >		
Q401	8-729-920-21	TRANSISTOR	DTC314TK-T-146	
Q402	8-729-920-21	TRANSISTOR	DTC314TK-T-146	
Q403	8-729-920-21	TRANSISTOR	DTC314TK-T-146	
Q404	8-729-920-21	TRANSISTOR	DTC314TK-T-146	
Q601	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	
Q602	8-729-421-22	TRANSISTOR	UN2211	
Q801	8-729-421-22	TRANSISTOR	UN2211	
Q803	8-729-424-08	TRANSISTOR	UN2111	
Q901	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q902	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q903	8-729-015-11	TRANSISTOR	2SD1802FAST-TL	
Q904	8-729-424-08	TRANSISTOR	UN2111	
Q905	8-729-421-22	TRANSISTOR	UN2211	
Q906	8-729-052-52	TRANSISTOR	KTC2026Y	
Q907	8-729-424-08	TRANSISTOR	UN2111	
Q908	8-729-421-22	TRANSISTOR	UN2211	
Q909	8-729-903-46	TRANSISTOR	2SB1132-P	
Q910	8-729-421-22	TRANSISTOR	UN2211	
Q911	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q912	8-729-052-52	TRANSISTOR	KTC2026Y	
Q913	8-729-424-08	TRANSISTOR	UN2111	
Q914	8-729-421-22	TRANSISTOR	UN2211	
Q915	8-729-421-22	TRANSISTOR	UN2211	
Q916	8-729-920-85	TRANSISTOR	2SD1664-QR	
Q917	8-729-421-22	TRANSISTOR	UN2211	
Q918	8-729-903-46	TRANSISTOR	2SB1132-P	
Q919	8-729-421-22	TRANSISTOR	UN2211	
Q920	8-729-820-46	TRANSISTOR	2SB1202FAS	
Q921	8-729-421-22	TRANSISTOR	UN2211	
Q922	8-729-903-46	TRANSISTOR	2SB1132-P	
		< RESISTOR >		
R401	1-216-813-11	METAL CHIP	220 5% 1/10W	
R402	1-216-813-11	METAL CHIP	220 5% 1/10W	
R403	1-216-813-11	METAL CHIP	220 5% 1/10W	
R404	1-216-813-11	METAL CHIP	220 5% 1/10W	
R406	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R407	1-216-864-11	METAL CHIP	0 5% 1/10W	
R408	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R409	1-216-864-11	METAL CHIP	0 5% 1/10W	
R410	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R412	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R413	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R414	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R415	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R416	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R417	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R418	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	
R419	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R420	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R601	1-216-864-11	METAL CHIP	0 5% 1/10W	
R602	1-216-809-11	METAL CHIP	100 5% 1/10W	
R603	1-216-809-11	METAL CHIP	100 5% 1/10W	
R604	1-218-867-11	RES-CHIP	6.8K 5% 1/10W	
R605	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R606	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R607	1-216-817-11	METAL CHIP	470 5% 1/10W	
R608	1-216-797-11	METAL CHIP	10 5% 1/10W	
R609	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	
R610	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R611	1-216-853-11	METAL CHIP	470K 5% 1/10W	
R612	1-216-797-11	METAL CHIP	10 5% 1/10W	
R613	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	
R615	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R616	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	
R617	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R618	1-216-809-11	METAL CHIP	100 5% 1/10W	
R619	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R620	1-216-809-11	METAL CHIP	100 5% 1/10W	
R621	1-216-857-11	METAL CHIP	1M 5% 1/10W	
R623	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R701	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R703	1-216-864-11	METAL CHIP	0 5% 1/10W	
R704	1-216-864-11	METAL CHIP	0 5% 1/10W	
R801	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R802	1-216-835-11	METAL CHIP	15K 5% 1/10W	
R804	1-247-807-31	CARBON	100 5% 1/4W	
R805	1-216-809-11	METAL CHIP	100 5% 1/10W	
R806	1-216-809-11	METAL CHIP	100 5% 1/10W	
R807	1-216-809-11	METAL CHIP	100 5% 1/10W	
R808	1-218-716-11	METAL CHIP	10K 0.5% 1/10W	
R809	1-218-716-11	METAL CHIP	10K 0.5% 1/10W	
R810	1-218-716-11	METAL CHIP	10K 0.5% 1/10W	
R811	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R812	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R813	1-216-809-11	METAL CHIP	100 5% 1/10W	
R814	1-216-809-11	METAL CHIP	100 5% 1/10W	
R815	1-216-809-11	METAL CHIP	100 5% 1/10W	
R816	1-216-813-11	METAL CHIP	220 5% 1/10W	
R817	1-216-809-11	METAL CHIP	100 5% 1/10W	
R818	1-216-809-11	METAL CHIP	100 5% 1/10W	
R819	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R820	1-216-809-11	METAL CHIP	100 5% 1/10W	
R821	1-216-809-11	METAL CHIP	100 5% 1/10W	
R822	1-216-809-11	METAL CHIP	100 5% 1/10W	
R823	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R824	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R825	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R826	1-216-849-11	METAL CHIP	220K 5% 1/10W	
R827	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R828	1-216-849-11	METAL CHIP	220K 5% 1/10W	
R829	1-216-809-11	METAL CHIP	100 5% 1/10W	
R830	1-216-809-11	METAL CHIP	100 5% 1/10W	
R831	1-216-849-11	METAL CHIP	220K 5% 1/10W	(CA600)
R832	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R834	1-216-864-11	METAL CHIP	0 5% 1/10W	
R835	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R836	1-216-809-11	METAL CHIP	100 5% 1/10W	
R838	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R839	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R840	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R842	1-216-864-11	METAL CHIP	0 5% 1/10W	
R845	1-247-887-00	CARBON	220K 5% 1/4W	
R846	1-216-849-11	METAL CHIP	220K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R847	1-247-887-00	CARBON	220K	5%	1/4W
R848	1-247-887-00	CARBON	220K	5%	1/4W
R849	1-216-809-11	METAL CHIP	100	5%	1/10W
R850	1-216-809-11	METAL CHIP	100	5%	1/10W
R851	1-216-809-11	METAL CHIP	100	5%	1/10W
R852	1-216-809-11	METAL CHIP	100	5%	1/10W
R853	1-216-809-11	METAL CHIP	100	5%	1/10W
R854	1-216-809-11	METAL CHIP	100	5%	1/10W
R859	1-216-864-11	METAL CHIP	0	5%	1/10W
R860	1-216-864-11	METAL CHIP	0	5%	1/10W
R866	1-216-845-11	METAL CHIP	100K	5%	1/10W
R867	1-216-845-11	METAL CHIP	100K	5%	1/10W
R868	1-216-845-11	METAL CHIP	100K	5%	1/10W
R901	1-216-821-11	METAL CHIP	1K	5%	1/10W
R903	1-249-425-11	CARBON	4.7K	5%	1/4W
R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
R905	1-216-841-11	METAL CHIP	47K	5%	1/10W
R906	1-216-833-11	METAL CHIP	10K	5%	1/10W
R907	1-216-833-11	METAL CHIP	10K	5%	1/10W
R908	1-216-841-11	METAL CHIP	47K	5%	1/10W
R909	1-216-841-11	METAL CHIP	47K	5%	1/10W
R910	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R911	1-216-845-11	METAL CHIP	100K	5%	1/10W
R913	1-249-427-11	CARBON	6.8K	5%	1/4W
R914	1-216-845-11	METAL CHIP	100K	5%	1/10W
R915	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R916	1-249-404-00	CARBON	82	5%	1/4W
R917	1-249-404-00	CARBON	82	5%	1/4W
R918	1-249-404-00	CARBON	82	5%	1/4W
R919	1-249-404-00	CARBON	82	5%	1/4W
R920	1-249-404-00	CARBON	82	5%	1/4W
R921	1-249-404-00	CARBON	82	5%	1/4W
R922	1-247-816-11	CARBON	240	5%	1/4W
R923	1-216-845-11	METAL CHIP	100K	5%	1/10W
R924	1-249-421-11	CARBON	2.2K	5%	1/4W
R925	1-216-821-11	METAL CHIP	1K	5%	1/10W
R926	1-249-413-11	CARBON	470	5%	1/4W
R927	1-249-417-11	CARBON	1K	5%	1/4W
R930	1-216-845-11	METAL CHIP	100K	5%	1/10W
R931	1-249-421-11	CARBON	2.2K	5%	1/4W
R932	1-216-805-11	METAL CHIP	47	5%	1/10W
R934	1-216-845-11	METAL CHIP	100K	5%	1/10W
R935	1-249-421-11	CARBON	2.2K	5%	1/4W
		< SWITCH >			
S801	1-692-431-21	SWITCH, TACTILE (RESET)			
		< THERMISTOR (POSITIVE) >			
TH900	1-801-792-21	THERMISTOR, POSITIVE			
TH901	1-810-940-11	THERMISTOR, POSITIVE			
		< TUNER >			
TU601	A-3220-812-A	TUNER UNIT (TUX-020)			
		< VIBRATOR >			
X601	1-579-242-41	VIBRATOR, CRYSTAL (4.332MHz)			
X801	1-781-822-21	VIBRATOR, CERAMIC (18.432MHz)			

Ref. No.	Part No.	Description			Remark
X802	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
	A-3283-270-A	SERVO BOARD, COMPLETE			
		**********			
	1-683-666-11	PICK-UP FLEXIBLE BOARD			
		< CAPACITOR >			
C1	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-104-609-11	ELECT CHIP	100uF	20%	4V
C5	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C8	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C9	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C10	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C11	1-162-909-11	CERAMIC CHIP	4PF	0.25PF	50V
C13	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C14	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C15	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C16	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C17	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C18	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C19	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C20	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C22	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C23	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C24	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C25	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C26	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C27	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C29	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C30	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C34	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C35	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C36	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C38	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C41	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C43	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C44	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C70	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C71	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN1	1-764-616-12	HOUSING, CONNECTOR (PC BOARD) 30P			
CN3	1-770-347-21	CONNECTOR, FPC 6P			
		< RESISTOR >			
FB5	1-216-298-11	RES-CHIP	2.2	5%	1/10W
		< IC >			
IC1	8-759-699-98	IC uPD63711GC-8EU			
IC2	8-759-658-87	IC BA5810FP-E2			
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-R			

SERVO **SPEAKER** **SUB**

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R3	1-216-797-11	METAL CHIP	10	5%	1/10W
R5	1-218-344-11	RES-CHIP	7.5K	5%	1/10W
R6	1-216-837-11	METAL CHIP	22K	5%	1/10W
R7	1-216-839-11	METAL CHIP	33K	5%	1/10W
R8	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9	1-216-840-11	METAL CHIP	39K	5%	1/10W
R10	1-216-835-11	METAL CHIP	15K	5%	1/10W
R12	1-216-837-11	METAL CHIP	22K	5%	1/10W
R14	1-216-841-11	METAL CHIP	47K	5%	1/10W
R15	1-216-841-11	METAL CHIP	47K	5%	1/10W
R17	1-216-809-11	METAL CHIP	100	5%	1/10W
R18	1-216-809-11	METAL CHIP	100	5%	1/10W
R19	1-216-809-11	METAL CHIP	100	5%	1/10W
R20	1-216-809-11	METAL CHIP	100	5%	1/10W
R21	1-216-821-11	METAL CHIP	1K	5%	1/10W
R22	1-216-821-11	METAL CHIP	1K	5%	1/10W
R26	1-216-797-11	METAL CHIP	10	5%	1/10W
R29	1-216-833-11	METAL CHIP	10K	5%	1/10W
R30	1-216-833-11	METAL CHIP	10K	5%	1/10W
R31	1-216-789-11	METAL CHIP	2.2	5%	1/10W
		< VIBRATOR >			
X1	1-795-520-11	VIBRATOR, CERAMIC (16.9344MHz)			
**********					
	1-685-147-11	SPEAKER BOARD (supplied with MAIN BOARD, COMPLETE)			
		**********			
**********					
	1-659-834-11	SUB BOARD			
		**********			
	1-683-665-11	MOTOR FLEXIBLE BOARD			
		< CONNECTOR >			
CN1	1-770-347-21	CONNECTOR, FPC 6P			

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2001. 12	New
1.1	2002. 04	Change of a production country. (ENG-02002)